RS
111
P4P592
v.33
no.9
c.1
BMES

ALUMNI REPORT

PUBLISHED BY THE ALUMNI ASSOCIATION OF THE PHILADELPHIA COLLEGE OF PHARMACY

PUBLICATION OFFICE, 145 N. TENTH ST., PHILADELPHIA

VOL. XXXIII. JUNE, 1897. No. 9.

Contents

GEORGE W. KENNEDY.

EDITORIALS.

EDWARD C. JONES MEMORIAL FUND.

SEVENTY-SEVENTH ANNOUNCEMENT.

EDUCATION PAYS.

PHARMACEUTICAL MEETING:
- Yerba del Pollo.
- On the Occurrence of Strontium in Plants.
- Note on Red Mercuric Oxide.
- Ibis Firma.
- Oleum Anodinum.
- Moffat Formaldehyde Generator.

ANNUAL MEETING.

EXECUTIVE BOARD MEETINGS.

EXAMINATION QUESTIONS.

OUR GRADUATES.

ITEM

4603
23/6 97.

Price: One dollar, each year, in advance (9 numbers). Subscriptions date from the October issue. Single numbers, fifteen cents.

Address all publication matter to the Editor, Joseph W. England, 145 North Tenth Street, and all business matter to the Business Manager, Wm. Nelson Stem, 2000 Callowhill Street, Philadelphia.

ARE YOU INTERESTED

In making your own Toilet Waters?

If so, you can make superior Toilet Waters at a moderate cost by using

FRENCH'S
TOILET WATER ESSENCES

We make the following:

Ess. Violet	*Ess. Lilac Blossoms*
" Lavender	*" White Heliotrope*
" Bay Laurel	*" Crab Apple Blossoms*
" Florida	*" Trailing Arbutus*
" Verbena	*" Lily of the Valley*
" White Rose	*Oil Cologne*

Samples free to Druggists who send us their label and mention this paper

FRENCH, CAVE & CO.

MANAGERS

PHILADELPHIA

WAMPOLE'S
BEEF, WINE AND IRON

IN BULK

By bbl.	$1.30 per gal.
" ½ bbl.	1.35 "
" 10 gal. pkgs.	1.40 "
" 5 " "	1.50 "
Less quantity,	1.75 "

No charge for packages.

With handsome lithographed labels. Buyer's name prominently printed on same, at the following reduced prices, in full 16-oz. bottles:

¼ gross lots,	$42.00 per gross
½ " "	40.00 "
1 " "	40.00 "

Packed in ¼ Gross Cases

We use a Pure Sherry Wine in the manufacture of this article, assuring a delicate flavor, and we guarantee the quality to be equal to any in the market.

We invite comparison with other manufacturers, and will cheerfully furnish samples for that purpose.

Your early orders and inquiries solicited through wholesale jobbers or direct from us.

HENRY K. WAMPOLE & CO.

441 GREEN STREET

Diluted Fluid Extracts Are Not Tinctures

The United States Pharmacopœia gives formulæ for making Tinctures, others for making Fluid Extracts, on which basis each is prescribed and should be dispensed.

As human lives depend upon the exactitude of medication, the greatest care should be exercised to guard its accuracy.

There is a marked saving to the pharmacist in making his own preparations in addition to the correct results attained.

We grind the finest drugs obtainable for percolation, and where assay is practicable, give their strength on the label.

Send for Price List, Formulary and Samples.

GILPIN, LANGDON & CO.

BALTIMORE, MD.

RITTER'S GRAPE JUICE

IS ABSOLUTELY PURE. It contains no salicylic acid.

RITTER'S GRAPE JUICE

IS UNFERMENTED Juice of the Concord Grape and contains no Alcohol.

RITTER'S GRAPE JUICE

IS HIGHLY CONCENTRATED and will go farther than any other Grape Juice. It may be diluted with one or as much as two parts of water.

RITTER'S GRAPE JUICE

IS THE BEST and at the same time the most economical.

Half-pint bottles, 3 dozen in a case
Pint bottles, 2 dozen in a case
Quart Bottles, 1 dozen in a case

Send for prices, advertising matter and other information to our office

Philip J. Ritter Conserve Company
Office, 2156 East Dauphin Street, Philadelphia, Pa.

TRIPHENIN MERCK

SUPERIOR TO PHENACETIN

Has decided advantages over it. Triphenin is a coal-tar derivative, and is highly successful in all conditions demanding a prompt and safe antipyretic or analgesic.

TANNALBIN

Manufactured by Knoll & Co., Ludwigshafen, a. R.

Is albuminate of tannin which has been subjected to dry heating at high temperature. It is an active, reliable intestinal astringent, and has none of the disadvantages of the salts of silver, lead and bismuth, or of tannin. Tannalbin is inactive in the mouth or stomach, but is uniformly effective in the intestines.

TANNOFORM

Is of eminent service in excessive perspiration, especially when attended by intense irritation. It restrains profuse secretion and overcomes offensive odor. It adheres closely to the skin, or to irritated surfaces, and is perfectly innocuous.

FORMALDEHYDE MERCK

A non-irritating, non-toxic, surgical and general antiseptic in wounds, abscesses, etc., and for clothing, bed-linen, sick-chambers, etc. It acts as a preservative of collyria and anatomical and botanical specimens. It prevents rancidity in ointments, the souring of milk and cream, and the spoiling of infusions.

MERCK & CO., UNIVERSITY PLACE, NEW YORK

MANHATTAN SPIRIT CO.

BUFFALO, N. Y.

SOLE MANUFACTURERS OF

COLUMBIAN SPIRIT

(TRADE MARK)

A CHEMICALLY PURE METHYL ALCOHOL — PRICE, OVER ONE-THIRD LESS THAN GRAIN ALCOHOL

IN BARRELS AND HALF-BARRELS (26 GALLONS) — NO CHARGE FOR PACKAGE

IT CANNOT BE USED in manufacturing articles intended for human consumption except where the spirit is evaporated, recovered or destroyed—such as solid extracts, etc.

IT CAN BE USED for making fluid extracts, tinctures, etc., if intended wholly for external use. For liniments, bathing purposes, burning under chafing dishes and in spirit lamps, as a solvent for shellacs and gums, and for innumerable other household and manufacturing purposes, it is **THE EQUAL OF ALCOHOL.**

SUBSCRIBE

...FOR THE...

American Journal of Pharmacy

A Magazine which records the opinions and researches of the foremost pharmaceutical writers of the day. Neither the pharmacist, the professor nor the college student can afford to be without it, for all the essential branches of pharmacy receive liberal attention.

TERMS: $3.00 per year.

Students of the Philadelphia College of Pharmacy may subscribe at a reduced rate. Address,

American Journal of Pharmacy

145 N. TENTH STREET

PHILADELPHIA

...THE...

Philadelphia College of Pharmacy

A New Era in Pharmaceutical Education

With the completion of the present session, in April of this year, the Philadelphia College of Pharmacy will cease to graduate students on a two-year course, and the 77th Annual Session, commencing in October, 1897, will inaugurate the complete three-year system which was started in the Autumn of 1895.

The Philadelphia College of Pharmacy will take no backward steps in thoroughness. Two years have been found too short a time in which to educate a professional pharmacist; therefore all who receive the new degree, Doctor in Pharmacy, from this College must devote three years to the acquisition of a pharmaceutical education, and in addition give ample evidence that the three years' study have been profitable ones. There is no room in the world for half-educated pharmacists. Students from other colleges may be admitted to advanced standing on passing the necessary examination and otherwise giving satisfactory evidence of their ability to derive benefit from advanced instruction, and graduates from the recognized colleges of pharmacy may be admitted to the third year course.

Those who wish to join the *fin de siecle* class of 1900 may matriculate now for October, 1897. This class is sure to be a notable one, as was the Centennial Class in 1876 and the Columbian Class in 1893.

The 77th Annual Announcement will be ready in May, and you are requested to send an early application for it.

...*ADDRESS*...

Philadelphia College of Pharmacy

145 N. Tenth St., Philadelphia.

TANGLEFOOT
SEALED STICKY FLY PAPER

TRY TO SELL IT BY THE BOX

BORDER, STRONGER AND MORE PLIABLE
STICKY, STICKIER AND MORE ENDURING
DESIGN, - - - NEW AND PRETTIER
PRICE, - - - - - - LOWER
PROFIT, - - - - - - LARGER

EVERY STOREKEEPER AND MANY HOUSEKEEPERS WILL BUY A BOX

PRICES FOR 1897

REGULAR 10 Boxes in a Case *30c. per Box, $2.55 per Case*
"LITTLE" 15 Boxes in a Case *13c. per Box, $1.45 per Case*
HOLDERS, 50 Holders in a Box, 75c. per Box

The Unique Nipple Shield

We call special attention to this Nipple Shield as being the simplest and best made. It consists of but two pieces, the Glass Shield, which is made to conform in shape with the breast, and not to obstruct the milk ducts, and a Perfection Nipple which will not collapse.

The constricted neck of the Nipple also acts as a guard or cushion to prevent the painful stretching of the mother's nipple.

JOHN M. MARIS & CO.

312 Market Street
PHILADELPHIA

219 Fulton Street
NEW YORK

ALUMNI ASSOCIATION,
PHILADELPHIA COLLEGE OF PHARMACY,
1897–'98.

President,
HARRY L. STILES, '85, 601 N. 33d Street.

First Vice-President,
JAMES C. PERRY, '91, 4122 Haverford Avenue.

Second Vice-President,
F. WM. E. STEDEM, '82, 701 N. Broad Street.

Treasurer,
WM. L. CLIFFE, '84, Kensington Avenue and Somerset Street.

Secretary,
WM. E. KREWSON, '69, 1836 Franklin Street.

Corresponding Secretary,
THEODORE CAMPBELL, Overbrook, Pa.

BOARD OF DIRECTORS.

For One Year.

Jos. W. England, '83, 145 N. 10th Street.
Rush P. Marshall, '81, S. E. Corner 16th and Race Sts.
Jacob S. Beetem, '78, 3218 Montgomery Avenue.
Cornelius E. Spenceley, '78, N. E. Corner Seventh and Master Sts.

For Two Years.

Wallace Procter, '72, 1900 Pine St.
C. Carroll Meyer, '73, 341 N. 18th St.
Wm. A. Bullock, '86, 528 Arch St.
John H. Hahn, '81, N. E. Cor. Twentieth and Federal Sts.

For Three Years.

Dr. J. Louis D. Morison, '88, 1936 Diamond St.
Henry Trimble, '76, St. David's P. O., Pa.
Wm. N. Stem, '73, 2000 Callowhill St.
David H. Ross, '78, Corner Almond and Norris Streets.

STANDING COMMITTEES FOR 1897-98.

Finance Committee.

James C. Perry, '91, Chairman, F. Wm. E. Stedem, '82, Theodore Campbell, '93.

Publication Committee.

Dr. J. L. D. Morison, '88, Chairman, F. Wm. E. Stedem, '82, Wm. E. Krewson, '69,
Jos. W. England, '83, Editor, Wm. Nelson Stem, '73, Business Manager.

Committee on Social Meetings.

Jos. W. England, '83, Chairman, Dr. C. B. Lowe, '84,
David H. Ross, '78, F. Wm. E. Stedem, '82, Cornelius E. Spenceley, '78.

Historical Committee.

Wm. E. Krewson, '69, Chairman, Jos. W. England, '83, Prof. Jos. P. Remington, '66.

Memorial Committee.

John H. Hahn, '81, Chairman, Wm. E. Krewson, '69, Dr. C. B. Lowe, '84.

Committee on Annual Alumni Reception.

C. Carroll Meyer, '73, Chairman, David H. Ross, '78, Wm. E. Krewson, '69.

Committee on Class Organization.

Dr. A. W. Miller, '82, Chairman, Frank G. Ryan, '84,
Dr. C. B. Lowe, '84, Frank X. Moerk, '84, Wallace Procter, '72.

Delegates to the American Pharmaceutical Association.

Frank G. Ryan, '84, Chairman,
Henry Trimble, '76, F. Wm. E. Stedem, '82, Wm. McIntyre, '63, Josiah C. Peacock.

Delegates to the Pennsylvania Pharmaceutical Association.

Wm. L. Cliffe, '84, Chairman,
Frank X. Moerk, '84, Dr. C. B. Lowe, '84, Theodore Campbell, '93, John H. Hahn, '81.

NOTICE!—The next meeting of the Officers and Board of Directors of the Alumni Association of the Philadelphia College of Pharmacy will be held at 145 N. Tenth Street, on Thursday, October , 1897, at 3.30 P.M.

WM. E. KREWSON, Secretary.

W., T. & CO.'S

No. 20 CORN CURE BOTTLE

Also Adapted for Dispensing Tincture of Iodine

2 dr. French Square, Flint Glass, with Wood Top and Camel Hair Pencil.

Packed 1 gross in Pasteboard Box, per gross $9 80

Discount to the Trade, 50 per cent.

In lots of 1 gross or over, 50 and 10 per cent.

When ordered in lots of 6 gross or more, the bottles can be furnished with customers' names, etc., on one side, without extra expense.

TOOTH POWDER BOTTLES

WITH COMPOSITION CAPS

Patented May 28, 1895.

1006.

These bottles, having wide mouths, are easily filled with powder. The caps cannot become tarnished, and will always present an attractive and cleanly appearance.

	Per Gross.
No. 1006. 2¼ oz., with cream-colored caps,	$15.00
No. 1006. 2¼ oz., with caps assorted in six colors	15.00
No. 1007. 2¼ oz., Bottles of extra weight, caps assorted in six colors . .	17.00

These bottles with caps of assorted colors are not sold in less than 1 dozen lots.

In lots of 5 gross or over, No. 1006 can be furnished with lettering on the bottom, and No. 1007 with lettering on side.

1007.

DISCOUNTS.

In Original Packages of 1 gross	50 & 10 per cent.
In smaller lots	40 & 10 "
In 5 gross lots, lettered with customer's name, etc.	50 & 5 "

WHITALL, TATUM & CO.

MANUFACTURERS OF

Druggists', Chemists' and Perfumers' Glassware,

MANUFACTURERS, IMPORTERS AND JOBBERS OF

DRUGGISTS' SUNDRIES.

PHILADELPHIA,	NEW YORK,	BOSTON,
410-416 Race Street.	46 and 48 Barclay St.	41 and 43 Broad St.

SODA WATER FOUNTAIN REQUISITES

The Finest Quality
The Lowest Prices

Fruit Juices Fruit Syrups

Laxative Fruit Syrup

Wine of Cocoa Wine of Kola

Soluble Extract of Jamaica Ginger

Fluid Extract of Fresh Orange Peel and Lemon Peel

Extract of Vanilla Vanilla Beans

Powdered Mexican Vanilla Beans, 50% Sugar

Liquor Acid Phosphates (with or without Iron)

Lime Juice Lime Juice and Pepsin

Chocolate and Chocolate Syrups

Soda Foam

ROBERT SHOEMAKER & CO.

Fourth and Race Streets

PHILADELPHIA

Every retail druggist answering this advertisement will be sent a sample package of any the above-named preparations.

PUBLISHED BY THE ALUMNI ASSOCIATION OF THE
PHILADELPHIA COLLEGE OF PHARMACY.

VOL. XXXIII. · · · JUNE, 1897 · · · No. 9

GEORGE W. KENNEDY.

Probably no retail pharmacist in this State is more widely known than George W. Kennedy, the subject of this sketch. For a score and more of years he has been identified with movements in the interest of his profession, and has accomplished much for its betterment. Born in Philadelphia, on February 22, 1844, his early education was had in the public schools of this city, and at the age of fifteen years he commenced the study of pharmacy. Later he matriculated at the Philadelphia College of Pharmacy, and graduated with honor in the class of '69.

After graduation, Mr. Kennedy accepted a position with Geo. W. Jones & Co., of Memphis, Tenn., and in 1870 returned to Pennsylvania and went into the retail business at Pottsville, where he has since been.

During the Civil War he rendered two and a half years' service in the 3d Pennsylvania Reserves and 187th Regiment of the Pennsylvania Volunteers.

Aside from his business interests, he has actively associated himself with work of a public nature, having held numerous positions of honor and trust. He has been a school director of Pottsville since 1876, and was recently re-elected for another term of three years. He served as secretary of the School Board for six years, resigning to become a member of the House of Representatives. This latter position he held for two terms. For fifteen years he has served as president of the Benevolent Association of Pottsville, for nearly a quarter of a century as a member of the Board of Managers of the Children's Home, and for many years as treasurer of the Pottsville Athenæum.

Mr. Kennedy was president of the Alumni Association of the Philadelphia College of Pharmacy in 1876, and vice-president in 1875, and also for a number of years a member of its Executive Board. To him belongs the credit of assisting in the organization of the Pennsylvania Pharmaceutical Association in 1878. He was its first vice-president, in 1878-80, and its second president, in 1880-81. He has also served as a member on many of its more important committees.

Not alone in State pharmaceutical affairs has Mr. Kennedy been an active worker, but also in National. Elected a member of the American Pharmaceutical Association in 1869, he became, later, chairman of its Executive Committee. He has been the secretary of its Committee on Membership for nearly twenty-five years, and is at present secretary of the Council of the Association.

Mr. Kennedy has always exhibited a deep interest in pharmaceutical literature, and has written a large number of papers of a practical and useful nature, many of which have appeared in the pages of the *American Journal of Pharmacy*, or have been read before the meetings of the American Pharmaceutical Association, and the Pennsylvania Pharmaceutical Association. The many friends of Mr. Kennedy will wish him a long life of continued usefulness.

GEORGE W. KENNEDY.

Editorials.

EDWARD C. JONES MEMORIAL FUND.

It will be recalled that shortly after the demise of the late Edward C. Jones, there was inaugurated by the Alumni Association a movement to found an "Edward C. Jones Memorial Fund," the interest of which was to be used for the paying of an Edward C. Jones Scholarship in the Philadelphia College of Pharmacy. It was felt that no better means could be devised of perpetuating the good name of the late treasurer of the Alumni Association than this, and an appeal was therefore made for subscriptions. A goodly number of subscriptions were received, and at the meeting of the Executive Board of the Alumni Association of the Philadelphia College of Pharmacy, held February 4, 1897, the following resolution was adopted:

That the Edward C. Jones Memorial Committee be directed to confer with the Committee on Alumni of the Board of Trustees for the purpose of devising a plan whereby an Edward C. Jones Laboratory Scholarship may be created in the College, and that the committee be authorized to transfer to the Philadelphia College of Pharmacy, through the Committee on Alumni, the money received on account of the fund, under such conditions as may be mutually agreed upon.

In accordance with this resolution, the committees named met, considered the subject, and made a proposition to the Board of Trustees of the College at the meeting of the latter, held June 1, 1897.

It was stated that there had been subscribed to the fund the sum of $654. Of this amount $612 had been paid in, leaving $42 unpaid. The committees asked the College to accept as a perpetual trust the money which had been collected, and might hereafter be collected, and to establish free scholarships for laboratory instruction, to be known as the Edward C. Jones Scholarships, the College to allow interest on the fund, the interest only to be used for the purchase of tickets to the courses of instruction for which the scholarships are to be awarded, the scholarships to be awarded at the discretion of the Professors and Committee on Examination of the Board of Trustees, upon formal applications, under such regulations as may be prescribed. If at any time the interest on the fund amounts to more than sufficient to purchase the tickets issued upon the scholarships awarded, the surplus is then to be added to the principal sum, and to draw interest. And if the principal sum increases to yield sufficient interest to do so, then further tickets shall be awarded.

The proposition of the Alumni Association was unanimously accepted by the Board of Trustees of the College, the latter generously agreeing to waive its share of receipts on the Edward C. Jones Scholarship tickets, and, in addition, passed a vote of thanks to the Alumni Association for its good work in perpetuating the name of so good a friend of the Philadelphia College of Pharmacy as was the late Edward C. Jones. The Trustees further agreed to award two tickets under the scholarship, next October.

The advantages of a plan of this kind are many. In the first place, the Alumni Association is relieved of the care of the trust funds and their investment, and a means is provided of having them accomplish the fullest measure of usefulness. The scheme adopted is a flexible one, and permits of further additions or contributions. If there be any who wish to contribute to the fund, either now or in the future, the way will always be open.

THE SEVENTY-SEVENTH ANNOUNCEMENT.

The Seventy-seventh Announcement of the Philadelphia College is about to be issued, and advance proof sheets show that it is full of interesting information to prospective pharmaceutical students. In recognizing the need of the times for a longer and more thorough pharmaceutical training, by requiring attendance of matriculates upon three full courses of study and work extending through three years—instead of the usual two years' course—the Philadelphia College of Pharmacy has taken no backward step. It is a step in line with the many advances in instruction that this pioneer school has made in the past, and one that all other schools of its kind must make in time. The field of pharmaceutical knowledge—like the field of medical science—has so broadened that the extension of time for collegiate training has become an imperative necessity.

Upon those students who complete a three years' course, pass the examinations successfully, and are properly qualified as to experience, the College will confer the degree of Doctor in Pharmacy (P.D.). Graduates in pharmacy from the College may, upon passing the third year examinations, and paying the usual examination fee, have conferred upon them the degree of Doctor in Pharmacy.

To meet the demands of those who wish a training in pharmacy and allied sciences, as a preliminary to the study of medicine, or with a view of following a manufacturing pursuit, the College offers to give this training, under certain conditions, and to grant the degree of Pharmaceutical Chemist (P.C.) These pharmaceutical chemists may have conferred upon them the degree of Doctor in Pharmacy, at the Commencement next succeeding the presentation of satisfactory evidence of pharmaceutical experience, and the payment of the usual examination fee.

The Announcement gives a clear-cut description of the subject matter for student study for the first, second and third year courses in Pharmacy, Chemistry, Botany and Materia Medica, and in the practical work of Analytical Chemistry, Operative Pharmacy, Vegetable Histology and Pharmacognosy. Opportunity is also afforded for advanced instruction in any of these branches, or for the prosecution of original research.

The schedule of fees shows the total cost of obligatory instruction to be unchanged—that is the total fees for each year average a little less than $100—despite the fact that more extended teaching is to be given students.

A number of scholarships have been established for deserving students, each of which entitles a student to free lecture or laboratory tickets.

At the end of each year's course, students will be required to pass written examinations in the theoretical branches taught, and practical examinations at the end of the first year in Pharmacognosy and Operative Pharmacy; at the end of the second year, in Vegetable Histology and Qualitative Analysis, and at the end of the third year, in Quantitative Analysis, Operative Pharmacy and Pharmaceutical Assaying.

To promote rivalry in student work, ten prizes are annually presented, either as memorials, or by the friends and teachers of the College. In addition, the Alumni Association offers a gold medal to the student of the graduating class passing the best examination in all branches, and nine certificates of excellence to students receiving the highest

averages of the class in the different branches of study and work.

The Announcement is handsomely illustrated with cuts of the rooms of the College Building, and refers also to the Pharmaceutical Meetings, the Students' Herbarium, the Alumni Association, the Museum, the Library, and various details of interest to prospective students.

We have dwelt at length upon this subject, so that its details may be made familiar to all the graduates of the Philadelphia College of Pharmacy. The ownership of a diploma from this school is justly regarded as a high honor by each graduate who has received it, and that no graduate would willingly relinquish it, we feel safe in asserting. But it is an honor that morally obligates its holder to advance the best interests of legitimate pharmacy wherever possible, and to advance the best interests of his *Alma Mater*, which stands for all that is best in legitimate pharmacy.

So, we earnestly urge every graduate to constitute himself a committee of one to disseminate knowledge regarding the eminent work and worth of the Philadelphia College of Pharmacy as a teaching institution, especially among those contemplating attendance upon a school of pharmacy, to the end that the class matriculating next October may be the largest in numbers of any that has ever matriculated in the College. Send in your name for an Announcement, or send the names of prospective students to our fellow-alumnus, Thomas S. Wiegand, the Actuary of the College.

COLLEGE EDUCATION PAYS.

It is but natural that those who are considering the expediency of taking a course of training in a college of pharmacy should ask themselves the practical question: "Does college education pay?" Does the hard work involved in systematic mental discipline, the anxiety regarding examination results, and the expense—does it all pay? And the superficial observer, thinking only of the present, will say: "No! The work pays a very small dividend on the investment, and 'the game is not worth the candle.' Many of the State pharmacy laws do not require of applicants for examination that they be graduated in pharmacy, and the drug business, anyway, is going to the demnition bow-wows; so what's the use?"

But when the pharmaceutical student of to-day, having his own interest at heart, comes to study the question from its true view-point, he will discover that if there was ever a time in the history of the human race when education of the highest grade was imperiously demanded in every walk of life, that time is now. Never before have men and women been so generally and widely developed mentally as to-day, and this general development makes it imperative that those laying claim to excellence in any professional work shall be as thoroughly trained as possible in their special line.

There are other reasons why the pharmacist of to-morrow will needs be a well-trained man, and these are: Not that education in pharmacy brings wealth—for it does not—and not that it brings a sense of satisfaction in the consciousness of being master of one's work in life, though this is no small factor—but for the reason that through the agency of education, using the term in its broadest

sense, a man is enabled to live up to his highest possibilities.

With the general condition of business unrest through the country, it is natural that depression should also exist in work-a-day pharmacy. This condition has been aggravated by the fact that the vocation of pharmacy has been undergoing, for some years past, a radical evolution. Roughly speaking, the pharmacy of the shops may be classed as legitimate pharmaceutical work and illegitimate work. The former has to do with the proper conversion of drugs and medicines into preparations for use by the sick, and their sale. It deals with the health and lives of the public body, and is professional work of the highest type. It is a work that is requiring, more and more, each year, a wider and broader knowledge of the sciences that go to make up the art of the pharmacist.

On the other hand, the illegitimate or trade end of pharmaceutical practice is that part that has to do with the sale of nostrums, or proprietary preparations of unknown composition, and the scores of so-called sundries to be found in the modern pharmacy. Such a work requires no scientific knowledge. It is trade, pure and simple, and, being trade, must be conducted on the basis of the principles of trade.

In many respects it has been unfortunate for legitimate pharmacy in this country, that, in the past, it has been so dominated by trade interests; for the association has multiplied many times the needful number of drug stores, and has retarded the development of pharmacy as a science. Further, it has bred in the public mind a false conception of the nature of true pharmaceutical work, and the public has been educated to demand pharmaceutical service of a professional character on a trade basis.

While every pharmacist should have knowledge of the laws of trade, and experience in business workings, it is vitally important that he be thoroughly grounded in the details of the professional side of his daily work, for the reason that it seems to be only a question of time until there shall be two classes of public service, one legitimate pharmaceutical work, and the other the purely trade end of practical pharmacy. The evolution is, and has been for some time, at work, and the prevailing demoralization in the sale of "patents" and "sundries" is simply hastening the day of separation.

This leads up to the statement, then, that the wise pharmacist—like the wise virgins of the Holy Writ—is he who keeps his lamp of pharmaceutical learning ever burning; while the foolish pharmacist—like the foolish virgins—is he who keeps his lamp of learning unlit, plods along in daily grooves, ignoring the tendency of the times, and unmindful of any such question as the "survival of the fittest."

The pharmaceutical student of to-day will be the pharmacist of to-morrow, and the wise student is he who recognizes the signs of the times regarding matters pharmaceutical, and acts for his future good by taking a thorough course of training in a school of pharmacy. To prospective pharmaceutical students we urge that they obtain Announcements from different schools of pharmacy, study their contents, and decide rightly on their future course. In this connection, we would especially call their attention to the work and worth of the Philadelphia College of Pharmacy as a teaching institution. "A tree is known by its fruit," and if you would know of the worth of this "tree," with its graduates in every State of the Union, seek a graduate in your vicinity,

and ask him for full information regarding it. Or, if such a course be not practicable, write to the Actuary of the Philadelphia College of Pharmacy, at 145 North Tenth Street, Philadelphia, for information.

Pharmaceutical Meeting.

The eighth and last Pharmaceutical Meeting of the Philadelphia College of Pharmacy, of the series of 1896–97, was held on Tuesday afternoon, May 18, 1897, at three o'clock, with F. Wm. E. Stedem in the chair. The reading of the minutes of the previous meeting was dispensed with.

An interesting paper on "Yerba del Pollo," by Prof. Alfonso Herrera, of Mexico, was read by Prof. Henry Trimble. This plant has long had a reputation in Mexico as a valuable hemostatic. In the form of extract it is used by the most distinguished physicians of Mexico in the treatment of metrorrhagia and hemoptysis, administering it in one or two-grain pills in the former cases and injections in the latter.

In his analyses Professor Herrera found, in the juice, acetic acid, and in the extract, ammonium acetate, potassium chloride, albuminoids, vegetable albumin, chlorophyll, extractive and cellulose. Ammonia may be obtained even at an ordinary temperature by wetting the powdered plant and mixing it with lime or the carbonates of potassium or sodium. Professor Herrera believes that the hemostatic action of the plant is due to the fact that when its proteid principle comes in contact with blood, the free alkali of the latter reacts upon the former to separate ammonia, and this gas reacts upon the bloodvessels, irritating their tissue and contracting them, as Bèclard has observed. Indeed, it is affirmed that in several physiological experiments, this contraction has been observed.

"On the Occurrence of Strontium in Plants" was the subject of a timely paper presented by Prof. Henry Trimble. He instanced a number of plants, in the ashes of which strontium had been found, as, for example, the bark from different species of Castanopsis growing at Singapore, India, while a sample of American Castanopsis, grown in California, gave no indication of the presence of the metal. Two samples of oak and one of mangrove from India also contained strontium. A comparison of the data obtained led the writer to believe that the presence of strontium salts in the samples from Singapore was due to the composition of the soil in that country.

Prof. Samuel P. Sadtler referred to the use of strontium hydrate in sugar refining, and to the objectionable feature of its cost when first suggested for this purpose, on account of the limited supply of the minerals of strontium. The discovery of other mines since then had decreased the cost of the metal, and in regard to its occurrence in India he thought it probable that the Government or mining reports would give some information.

Professor Trimble replied that the Government officials reported only a trace of strontium salts in the Singapore soil.

A paper, entitled a "Note on Red Mercuric Oxide," was contributed by Joseph W. England. This was intended as a reply to the criticisms presented by Charles H. LaWall, at the meeting last month, on citrine ointment. The principal remarks of the author were on the question of the relative purity of red

mercuric oxide and metallic mercury, and the advisability of substituting the former for the latter in the formula for citrine ointment, as a matter of convenience. His information in regard to the purity of these substances did not accord with Mr. LaWall's statement concerning them, and in evidence of this, extracts from letters from three firms of manufacturing chemists were presented. One of the firms said: "We would state that our red mercuric oxide conforms strictly to the requirements of the United States Pharmacopœia, and we regard it as equal in purity to metallic mercury."

Another firm of manufacturing chemists, equally as prominent, wrote: "Our analysis shows that red mercuric oxide contains 99·7 per cent. HgO, and 0·3 per cent. of SiO_2. The silica is, no doubt, derived from the vessels in which the mercuric oxide is manufactured. Commercial metallic mercury varies between 99 and 100 per cent., while the distilled mercury is pure."

Another prominent chemical firm wrote: "We would state that our levigated mercuric oxide conforms to all the requirements of the U.S.P. 1890, save as regards absolute freedom from HNO_3; it contains very small traces of the latter. It conforms strictly to all the requirements of the Ph.G. iii, also, in regard to HNO_3. There is no doubt that the U.S.P. is hypercritical in the case of red mercuric oxide, as it is also in several other instances; for the faint traces of HNO_3 that our levigated grade contains are not known to interfere with any of the chemical applications of the preparation, and cannot possibly have any influence on the therapeutic action of the medicament. To provide an oxide absolutely free from HNO_3 is practically impossible commercially, and there is no necessity for the preparation."

The point was made by the writer that if these statements from three of the leading chemical firms of the country, regarding the purity of their red mercuric oxide, be true, then there should be no difficulty whatever in the pharmacist procuring an oxide that could be used as a substitute, if necessary, for metallic mercury in the making of ointment of mercuric nitrate.

Lyman F. Kebler casually made reference to a subject which had recently been brought to his notice. He said that a resinous substance, which had been applied to the trunks of some of the trees in the public squares of this city to serve as obstruction to insects, had been found to be harmful to the trees. In experimenting with solvents with the object of removing it, he found acetone to answer the purpose most effectually.

Some specimens and other objects added to the interest of the meeting, as follows:

A curious specimen of a growing plant of Japanese cultivation was loaned by Howard B. French. It belonged to the natural order Coniferæ, and in outline strikingly resembled a fowl, the fictitious name "Ibis firma" being significant of this.

A copy of letters-patent, which was an elaborate and formidable document, granted during the reign of George II of England, for a medicine "Oleum Anodinum," was presented by Chas. Bullock.

Professor Trimble called attention to a large specimen of canaigre root, showing the influence of cultivation, and to one of natural growth, much smaller in size, both of them having been grown at Rialto, California.

Among the samples was one of calcium carbide, presented by J. O. McHenry, of this city.

An improved attachment for the

"Moffatt Formaldehyde Generator," presented by the agents, Eli Lilly & Co., of Indianapolis, Ind., was exhibited.

The chairman believed in the efficacy of the apparatus as a disinfecting agent, but said that, in order to insure the generation of the gas, it was necessary to carefully adjust the wick.

On motion, the meeting adjourned. The next Pharmaceutical Meeting of the College, which will be the first one of the series of 1897-98, will be held in October.

Annual Meeting.

The Thirty-third Annual Meeting of the Alumni Association of the Philadelphia College of Pharmacy was held Monday afternoon, April 12, 1897, in the Auditorium of the College, 145 North Tenth Street. The meeting was called to order by the President, Dr. J. Louis D. Morison, at 2.30 P.M., and the following members were present, viz.:

Prof. Jos. P. Remington, '66; Wm. E. Krewson, '69; Wallace Procter, '72; David G. Potts, '73; Wm. N. Stem, '73; C. Carroll Meyer, '73; Dr. Richard V. Mattison, '73; Henry Trimble, '76; David H. Ross, '78; John H. Hahn, '81; F. Wm. E. Stedem, '82; Jos. W. England, '83; Dr. C. B. Lowe, '84; Frank G. Ryan, '84; Frank X. Moerk, '84; Wm. L. Cliffe, '84; Harry L. Stiles, '85; Wm. A. Bullock, '86; Dr. J. Louis D. Morison, '88; Jas. C. Perry, '91; Theodore Campbell, '93; Lee Goldsmith, '96, and Prof. Samuel P. Sadtler.

The President called for the reading of the minutes of the previous annual meeting. On motion of Frank G. Ryan, the reading of the minutes of the previous annual meeting, as well as the minutes of the Executive Board for the current year, was dispensed with.

Secretary Wm. E. Krewson read the list of those who became members during the year by paying the required fee, as follows: Lewis John Lehman, '88; Geo. Frank Brunier, '95; Jos. Sylvester Clair, '96; Chas. August Mueller, '97; Howard E. Ingling, '97, and Chas. Baker Lukens, '97.

He also read the list of the Class of '97 who became members of the Alumni Association by virtue of having been members of the College Review Quiz Classes. (See list upon minutes of Executive Board meeting held April 10, 1897.)

The Secretary stated that there were seventy-three members of the graduating class this year, and sixty-one of these had become members of the Alumni Association, and, adding to these the four who joined from other classes during the year, there was a total gain of sixty-five new members.

The President then read his annual address as follows:

To the Members of the Alumni Association.

FELLOW-ALUMNI:—The rolling about of another year in the life-history of the Alumni Association imposes upon me the very pleasant duty of addressing you upon the affairs of the Association as seen from the standpoint of the retiring presiding officer. With the close of the exercises attending the reception to the seventy-sixth graduating class to-night, we shall have rounded out nearly a third of a century of existence as an active organization, and while the past year has not shown any conspicuous evidences of activity beyond that of mere routine work, yet I am happy to say we are still quite healthy, notwithstanding the fact that there has been observed at times slight symptoms of inertia. If the interest in the work of the Association during the past year has at times seemed to flag, I am by no means convinced that she is therefore losing her vitality as an organization, for this, from her very nature, is almost impossible. But if we would preserve her high reputation as an active worker in the field in which she has so brilliantly achieved results, we must see to it that more of new blood is infused into her veins, and each and every member must give to her affairs a more lively interest in the future than seems to have characterized them in the year that has just been brought to a close.

I do not share with some the opinion that because the Association has relinquished its interests in the quizzes, it has therefore now no important work to do; on the contrary, there

never has been a time in the history of the Alumni Association when its field for work was larger and more full of promise than it is to-day.

The advent of the session of 1897–98 will see our College doors thrown wide open to receive for the first time in her history three distinct classes, and while her world-wide reputation as a teaching institution, her superior facilities for laboratory instruction, and a curriculum second to none in the country, will attract many students to her doors, yet there will still remain much important work of a missionary character to be done in order that her proud record as the leader in the van of American Pharmacy Schools be sustained. It is just here that the Alumni Association finds its true field for future work and usefulness; for having played well the role of foster mother to Laboratory and Quiz, thus materially aiding in the growth and development of the College, she can with becoming dignity now direct her energies to the important work of securing the material out of which the future Doctors in Pharmacy are to be made. To this end the issuance of our ALUMNI REPORT twelve times a year is urgently called for.

It is not my intention at this time to discuss the pros and cons of this proposition, because I believe that the question is already fully decided in the affirmative in the minds of very many of the members present. Nor is it my purpose to offer suggestions as to the ways and means for its accomplishment, since this problem of necessity must be left to the incoming administration to solve, but rather to urge upon the Association the advisability of giving to this important matter early and earnest consideration.

The finances of the Alumni Association, I am pleased to state, are in a far more healthy condition to-day than at any time during the past year, a happy consummation due largely to the watchful care of our Finance Committee. A careful study of the report of this committee will give you a far better idea of the true state of our finances than I can possibly give; suffice it to say, however, that here too must be urged constant watchfulness and thoughtful consideration, as upon the financial policy to be pursued by the Association will depend largely its ability to carry to a successful conclusion the important missionary work to which reference has been made.

The Social Meetings, held under the auspices of the Association during the past winter, have, on the whole, been quite successful, both from the standpoint of attendance and the character and interest of the addresses. Regarding the future of these meetings, I would suggest that owing to the fact that there will be no night sessions of the College Classes next year, it might be well to try the experiment of holding these meetings in the evening, instead of the afternoon, as has been our custom in the past.

Before closing my remarks, I desire to express what I believe to be the sense of this meeting, the profound sorrow felt by all at the death of Prof. Bastin. By his untimely departure we sustain the loss of an honored member, and the College a valued and distinguished teacher; and while we lament the passing of Edson S. Bastin, we, at the same time, rejoice that it has been our great privilege to have had him in our midst, if only for a short time, for by his genius and indomitable energy there has been added to our College a Microscopical Laboratory second to none in any teaching institution in the country, a work that will ever remain a glorious monument to his memory.

In conclusion, let me acknowledge my appreciation of the high honor conferred by election to the Presidency, and at the same time express to the members of the Board my sincere thanks for the many courtesies extended to me in all my official relations with them since my graduation.

Respectfully submitted,

J. LOUIS D. MORISON.

Philadelphia, April 12, 1897.

On motion, the address was referred to a committee of three to take into consideration the suggestions contained therein, the committee to report to the Executive Board.

The annual report of the Secretary was read as follows:

To the Members of the Alumni Association.

FELLOW-ALUMNI:—Your Secretary would respectfully submit this, his seventeenth annual report as Secretary, for the thirty-third year of the Alumni Association.

The Executive Board was called to meet seven times during this year, five regular and two adjourned meetings; once it adjourned on account of the death of the President's father, and once for want of a quorum.

There were five Social Meetings held during the course, but I regret to say were poorly attended by the members of the Association; although 1,000 notices were mailed to the resident membership, yet only a few responded to the notice. The Committee on Social Meetings did all that could be done to make the meetings successful.

The following persons delivered interesting lectures, as will be seen by the subjects selected:

Dr. Edward Rosenthal, Ph.G., '78; subject: "Antitoxin."

Dr. Wm. H. Welch; subject: "The Introduction of Vaccination into the United States."

Dr. F. X. Dercum; subject: "How We Think."

Dr. Lawrence F. Flick; subject: "Consumption; Its Nature, History, Curability and Prevention."

Dr. Albert E. Ferree Witmer, Ph.G., '90; subject: "The Physiology of Education."

Miss Frances E. Peirce, Principal of the Mt. Vernon Institute of Elocution, was also present with several of her pupils, who rendered interesting selections.

The ALUMNI REPORT has been issued as usual; six numbers of Vol. XXXIII have thus far been distributed, and the April number is almost ready for mailing. Vol. XXXIII, like its predecessors, has been a welcome messenger to our graduates. It is highly appreciated by our membership, and binds our graduates into closer fellowship with our *Alma Mater*. The only thing now needed is that it be issued in twelve numbers, one each month, instead of nine numbers each year, and I hope the coming year will witness this new departure.

During the past year our Association has not been as active as it should have been, owing, perhaps, to the financial depression felt throughout the country, a depression that has affected Pharmacy as well as all other professions. We hope that the coming year will be a prosperous one, and that our Association will find new fields of labor, or develop some new ideas to assist our *Alma Mater* in the great and noble work of higher pharmaceutical education.

During the past year our membership has not increased as in former years; only seven of our graduates became members by paying the fee, and fifty-eight from the College Review Quiz Classes, making a total addition of sixty-five for the fiscal year.

The Senior Class was quite small this year, owing to the change to the three-year course adopted last year, requiring all students matriculating in 1895 and thereafter to take a three-year course before they apply for graduation.

Our membership has suffered during the past year by the messenger of death, which has taken from us twenty-six of our active members; some of them were our most honored and active workers, as well as useful citizens in the various localities in which they resided. Two of our honorary members were also called from labor to rest. I refer to that veteran pharmacist, Robert Shoemaker, First Vice-President of the College, and Prof. Edson S. Bastin, Professor of Materia Medica and Botany in the College. Eleven graduates, who were not active members of the Association, also died.

Our membership now numbers 2,749, a net gain of 39 new members during the year.

Since the last annual meeting 20 of our members have purchased the Alumni Badge, making a total of 285 members who have procured the badge.

Your Secretary has received during the year from membership fees, $35; from the sale of badges, $120; from the sale of syllabus of natural orders, $27.25, and percentage on Class Badges, $3.91; or a total in receipts of $186.16, which has been paid over to the Treasurer.

The subscriptions to the Edward C. Jones Memorial Fund now amount to $607. It is earnestly hoped that more of our members and graduates will contribute to this fund, and thus perpetuate the memory of our late lamented and beloved Treasurer, Edward C. Jones.

The Alumni Prizes for the year will be awarded this evening to the following graduates:

Alumni Gold Medal to Clayton Edward Morgan, of Philadelphia; Alumni Prize Certificates: Pharmacy, John Phillips Bates, of Mansfield, Pa.; Chemistry, Walter Francis Praul, of Philadelphia; Materia Medica, Harry Matusow, of Minsk, Russia; General Pharmacy (Committee), Samuel Robert Pearce, of Manasquan, N.J.; Operative Pharmacy, Oliver Fawcett Wilson, of Pittsburg, Pa.; Analytical Chemistry, Albert Sylvester Brumbaugh, of Mansfield, O.; Pharmacognosy (Specimens), Claude Dallas Metzler, of Harrisonville, Pa.; Microscopy (Vegetable Histology), Miss Laura Marguerite Smiley, of Philadelphia.

This year we make a new departure, and

award a Prize Testimonial to the Second Course Student, as well as to the First Course Student—or, as we formerly termed it, Junior Student—who passes the best examination in his class.

The successful First Course Student is Melvin Wm. Bamford, of Reading, Pa., and the Second Course Student is George Carl Keen, of Vineland, N. J.

Before closing my report I have several suggestions to make. The first is that we hereafter dispense with the Social Meetings during the course, or else hold them in the evening.

The second suggestion is that we ask the Committee on Property of the College to allow the College Museum to be opened every day for the use of the students and pharmacists who might wish to avail themselves of the opportunity of visiting it.

I would also suggest that we have the ALUMNI REPORT issued in monthly numbers, and that the Publication Committee be authorized to make arrangements looking toward the accomplishment of a plan whereby this can be done.

In closing this report, I am glad to announce that while our Association has not performed any great achievements this year, yet it has been enabled to continue its good work in cementing more firmly the bond of good fellowship existing between the graduates and their *Alma Mater*.

I desire to thank the President and the officers and directors for their uniform kindness to me during the past year, and hope that the year we are just entering upon may witness new prosperity for our Association, not only in increased membership, but also that it may open new fields for work, and enable us to increase the prosperity of our honored College.

Respectfully submitted,

WILLIAM E. KREWSON, *Secretary*.

Philadelphia, April 12, 1897.

On motion, the report of the Secretary was accepted and entered on the minutes, and suggestions contained therein were referred to the Committee on President's Address.

The report of the Memorial Committee was read as follows:

To the Members of the Alumni Association.

FELLOW-ALUMNI:—Your Committee on Memorial would respectfully report that during the past year they have received the intelligence of the deaths of twenty-seven active members. Among those who have passed away since the last annual meeting will be found the familiar names of many active pharmacists. The list, with the date of death, is as follows:

Harry Roscoe Cushin, '93, died April 1, 1896, aged 27 years; Chas. A. Santos, '48, died April 14, 1896, aged 68 years; Dr. Wm. K. Mattern, '74, died April 16, 1896, aged 49 years; John P. Ross, '87, died April 17, 1896, aged 32 years; Dr. Frederick Dunning, '90, died May 8, 1896, aged 25 years; Frank H. Steacey, '83, died June 10, 1896, aged 35 years; Wm. F. Seiler, '85, died June 30, 1896, aged 30 years; Jacob Miller Clark, '82, died July 5, 1896, aged 37 years; Frederick A. Weiss, '90, died July 10, 1896, aged 29 years; John S. Boyd, '93, died July 17, 1896, aged 30 years; Louis C. Kusenberg, '84, died August 6, 1896, aged 33 years; Charles W. Riley, '66, died August 7, 1896, aged 51 years; Geo. W. Salot, '84, died August 7, 1896, aged 36 years; John C. Allen, '29, died August 9, 1896, aged 90 years; Oliver Brown Wolff, '92, died August 25, 1896, aged 33 years; Wm. C. Mayer, '81, died August 27, 1896, aged 35 years; Michael J. Rourke, '88, died August 28, 1896, aged 27 years; Geo. S. Henry, '74, died September 29, 1896, aged 45 years; Alonzo Robbins, '55, died December 1, 1895, aged 63 years; Jacob A. Scheidt, '72, died January 9, 1897, aged 47 years; Dr. Wm. Tag, '81, died January 12, 1897, aged 36 years; Frank Bowker, '87, died February 13, 1897, aged 30 years; Albert D. Wike, '67, died February 24, 1897, aged 52 years; Frederick G. Hertel, '89, died March 14, 1897, aged 29 years, and James Clavin, '89, died March 19, 1897, aged 31 years.

Your Committee would also report that they received the notices of the deaths of two of our active members who died previous to the last annual meeting, viz.:

Byron Edwin Bruenchenhein, '83, died at Marinetta, Wis., May 26, 1891, and Eugene C. Bronson, '68, died at Keokuk, Ia.

It is with great sorrow that your committee report that two of our honorary members passed away during the year:

Robert Shoemaker died December 17, 1896, aged 79 years, and Prof. Edson S. Bastin died April 6, 1897, aged 54 years.

So far as known, eleven of our graduates who were not active members of the Association have passed away, as follows:

John C. Long, '61, died July 7, 1896, aged 57

years; Isaac Newton Coffee, '74, died July 8, 1896, aged 44 years; Everett P. Stephens, '81, died October 11, 1897, aged 36 years; Dr. Louis W. Hildenbrand, '70, died November 13, 1896, aged 47 years; Jacob Dunton, '55, died January 18, 1897, aged 62 years; Dr. Wm. B. Spence, '83, died March 13, 1897, aged 35 years, and Wm. H. Faunce, '81, died March 14, 1897, aged 38 years.

Respectfully submitted,

JACOB S. BEETEM,
WM. E. KREWSON,
DR. CLEMENT B. LOWE,
Committee.

Philadelphia, April 12, 1897.

On motion, the report was accepted and referred to the Publication Committee.

The Committee on Social Meetings submitted the following report:

To the Members of the Alumni Association.

FELLOW-ALUMNI:—Your Committee on Social Meetings have only to report that in the past year five meetings have been held. Addresses were delivered on various subjects of interest by men of prominence in the various branches of science, and the attendance was fairly good. We have, however, to suggest to you the expediency of discontinuing the meetings, and merging them with the Pharmaceutical Meetings of the College.

F. WM. E. STEDEM,
Chairman.
D. H. ROSS,
J. W. ENGLAND,
C. E. SPENCELY,
DR. A. W. MILLER,
Committee on Social Meetings.

Philadelphia, April 12, 1867.

On motion, the report was accepted, and its suggestions were referred to the Executive Board for consideration.

Wm. N. Stem, Business Manager, made a verbal report in regard to the expenses of publishing the ALUMNI REPORT, stating that the year's report would be rendered at the October meeting of the Executive Board.

The Secretary read letters from the following members, which, on motion, were referred to the Committee on Publication:

Dr. Frank E. Stewart, '76, Detroit, Mich.; Dr. Robert A. Koempel, '76, New York City; Jacob S. Beetem, '78, Wilmington, Del.; Allen J. Kendig, '90, Clifton Heights, Pa.; Dr. Frank A. Hennessy, '90, New Hackensack, N. Y.; John H. Hubley, '94, New York City; Charles F. Carter, '95, Houston, Tex., and Wilmer P. Hoopes, '95, New Orleans, La.

The President announced that the next business would be the election of officers for the ensuing year.

The Secretary read the list of those who had been nominated, and moved that, as there was no opposition to any of the officers, Jos. W. England be requested to cast the unanimous vote of the Association for those nominated.

The motion was adopted.

The President appointed Dr. Clement B. Lowe and Frank G. Ryan to act as the tellers.

Mr. England cast the vote, and the tellers announced the following result, viz.:

President, Harry L. Stiles, '85.
First Vice-President, James C. Perry, '91.
Second Vice-President, F. Wm. E. Stedem, '82.
Treasurer, Wm. Lincoln Cliffe, '84.
Secretary, Wm. E. Krewson, '69.
Corresponding Secretary, Theodore Campbell, '93.

The President then declared the above-named officers as duly elected for the year 1897–98.

The election of four members of the Board of Directors to be chosen for the three-year term was then proceeded with.

The tellers declared that the following had received a majority of the votes cast, and were duly elected:

Dr. J. L. D. Morison, '88; David H. Ross, '78; Henry Trimble, '76, and Wm. N. Stem, '73.

The President then declared the four above-named duly elected for terms of three years.

The Secretary stated that there was a vacancy in the Board of Directors, owing to the fact that Theo. Campbell had been elected Corresponding Secretary, and moved that the Association go into an election to fill the vacancy of the unexpired term of two years of Theo. Campbell.

It was so ordered.

On motion, nominations were opened for the position of Director.

John H. Hahn, '81, and David G. Potts, '73, were then placed in nomination, but David G. Potts declined the nomination, and there being no further nominees, nominations were closed. The Association proceeded to ballot for one

Director, and John H. Hahn, '81, having received a majority of the votes cast, was duly declared elected to fill the vacancy of the unexpired term of Theodore Campbell.

On motion, the tellers were discharged with the thanks of the Association.

The Treasurer submitted his report for the year 1896-97, as follows:

To the Alumni Association.

FELLOW-ALUMNI:—Regarding the finances of the Association I will report as follows:

RECEIPTS.

To balance at the close of previous Annual Meeting . .	$266.94
To collections	2,658.83
Total	$2,925.77

EXPENDITURES.

By orders paid, Nos. 816 to 908, inclusive	$2,849.37
Balance	76.40
Total	$2,925.77

Respectfully submitted,

WM. LINCOLN CLIFFE,
Treasurer.

Philadelphia, April 12, 1897.

On motion, the report was accepted, and referred to an Auditing Committee.

The President appointed the following as the Auditing Committee: Harry L. Stiles, C. Carroll Meyer and David H. Ross.

The Finance Committee submitted a report as follows:

To the Alumni Association.

FELLOW-ALUMNI:—Your Finance Committee would respectfully report that they have examined the books and accounts of the Secretary, Business Manager of the REPORT and the Treasurer for the past year, and have found them correct, with a balance due the Association of $76 40 at this date.

Including a balance of $266.94, the Association had available during the year from all sources $2,925.77. The expenditures by orders, Nos. 816 to 908, inclusive, have been $2,849.37, leaving a balance of $76.40.

The Committee has also approved of bills amounting to $83.25, which will lay over until the new year's account.

Respectfully submitted,

HARRY L. STILES,
JAMES C. PERRY,
F. WM. E. STEDEM.

Philadelphia, April 12, 1897.

On motion, the report of the Finance Committee was accepted.

The Committee appointed to audit the Treasurer's accounts made the following report, which, on motion, was accepted, and ordered spread upon the minutes. The Committee was discharged with the thanks of the Association.

To the Alumni Association.

FELLOW-ALUMNI:—We have examined the book of the Treasurer, and compared same with the orders, and find the balance due the Association to be $76.40, as stated.

Respectfully,

C. CARROLL MEYER,
DAVID H. ROSS,
HARRY L. STILES,
Auditing Committee.

Philadelphia, April 12, 1897.

Harry L. Stiles moved that hereafter all notices of the Annual and Social Meetings be printed in the ALUMNI REPORT instead of being sent through circular notices as in previous years. The motion was adopted.

Wm. L. Cliffe offered the following resolution, which was unanimously adopted.

WHEREAS, There is at present before the Legislature of the State of Pennsylvania, at Harrisburg, a bill providing for the registration of physicians as pharmacists without examination after four years' medical practice, and also in the same bill a proviso for the examination of all applicants for registration who are pharmacists. Therefore, be it

Resolved, That we, the Alumni Association of the Philadelphia College of Pharmacy, in annual meeting assembled, do most emphatically protest against the passage of House Bill No. 303, as being detrimental to the interests of the public, and an unfair and unjust discrimination against pharmacists, who are a specially trained class of men—and who are compelled by the State law to undergo an examination—in favor of those who have received no special training, and who would be exempt from examination by the proposed bill.

On motion, the meeting adjourned.

Executive Board Meetings.

The fourth stated meeting of the Executive Board of the Alumni Association of the Philadelphia College of Pharmacy, for the year 1896-97, was held in Alumni Hall, at 145 North Tenth Street, on February 4, 1897, First Vice-President Harry L. Stiles occupying the chair.

The roll was called and the following were present, viz.:

Harry L. Stiles, Jas. C. Perry, Wm. L. Cliffe, Wm. E. Krewson, F. Wm. E. Stedem, Wm. N. Stem and Jos. W. England.

Communications were received from C. E. Spenceley, C. C. Meyer, Jacob S. Beetem, and Theodore Campbell, regretting that they were unable to be present.

The appointment by the President of the following committee to nominate officers for the ensuing year was announced:

Henry Trimble, '76; Dr. Chas. A. Weidemann, '67; Frank G. Ryan, '84; Cornelius E. Spenceley, '78; Wm. N. Stem, '73; Frank X. Moerk, '84; Milton Campbell, '93; Allen J. Kendig, '90; Albert Oetinger, '86; Jos. W. England, '83; Dr. Wm. J. Scott, '88; Milton Campbell, '83; John D. Rishell, '89; Dr. J. Louis D. Morison, '88, President, and Wm. E. Krewson, '69, Secretary.

A report from the committee was read, in which the statement was made that the committee had met on the afternoon of February 4, 1897, in the Library at the College, and that the following officers had been nominated:

President, Harry L. Stiles, '85; First Vice-President, James C. Perry, '91; Second Vice-President, F. Wm. E. Stedem, '82; Treasurer, Wm. Lincoln Cliffe, '84; Secretary, Wm. E. Krewson, '69; Corresponding Secretary, Theodore Campbell, '93.

Board of Directors (four to be chosen): Henry Trimble, '76; David H. Ross, '78; Wm. N. Stem, '73; Dr. J. Louis D. Morison, '88; Dr. Henry A. Newbold, '70; Allen J. Kendig, '90; Albert Oetinger, '86; Milton Campbell, '83; Wm. G. Nebig, '86, and Dr. E. Quinn Thornton, '81.

On motion, the report was accepted.

Secretary Krewson reported that he had received $18 for the sale of Alumni Badges since the previous meeting.

The Business Manager reported the collection of $331.20 on account of the ALUMNI REPORT advertisements.

The Treasurer reported that the balance at the last meeting was $123.53; that he had received from the Secretary $18, and from the Business Manager, $358.20, making a total of $499.73; also that he had paid out on orders $375.72, leaving a balance of $124.01 in the treasury.

On motion, the reports of the Secretary, Treasurer and Business Manager were accepted.

The Finance Committee reported that the Treasurer had received from all sources since the previous meeting $376.20, which, with a balance on hand at last report of $123.53, made a total of $499.73, and that there had been paid bills previously approved, $283.95, and on those approved since the last meeting, $91.77, making a total of $375.72 paid out since the last meeting, leaving a net balance of $124.01 in the treasury at this date.

On motion, the report of the Finance Committee was approved and their action in approving of the bills sustained.

On motion, it was agreed that orders be drawn for all bills which had been approved, and that they be paid, as funds were available.

J. W. England, chairman of the E. C. Jones Memorial Fund, reported that the amount of cash in the hands of the Treasurer at the last report was $549.23, and that $25.77 had been since received, making a total received to date of $575. There was still subscribed and not yet paid in, $79, making a total of $654 subscribed.

The Treasurer stated that by advice of the E. C. Jones Committee he had turned over to the Treasurer of the College $450 of this fund on loan, and that he held the Treasurer's (Mr. Shinn's) receipt for the same. This plan was thought to be advisable until some arrangement could be made for the investment of the money, or the College could be asked to keep it as it does other trust funds, the income to be used for the purposes of the fund. Such a plan would relieve the Alumni Association of any responsibility of making the investment, and would fulfil the purpose for which the fund was created.

On motion, the action of the Treasurer in

paying over the $450 of the E. C. Jones Memorial Fund to the College Treasurer was approved.

J. W. England offered the following resolution, which was adopted :

That the Edward C. Jones Memorial Committee be directed to confer with the Committee on Alumni of the Board of Trustees for the purpose of devising a plan whereby an Edward C. Jones Laboratory Scholarship may be created in the Philadelphia College of Pharmacy, and that the committee be authorized to transfer to the College, through the Committee on Alumni, the money received on account of the fund, under such conditions as may be mutually agreed upon.

The following resolution was offered by Mr. England, and on motion, adopted, viz.:

Resolved, That the Executive Board of the Alumni Association recommend to the annual meeting the names of Dr. Edward R. Squibb, of Brooklyn ; Dr. Chas. Rice, of New York City, and John Uri Lloyd, of Cincinnati, Ohio, for honorary membership.

The Secretary stated that the following members of the Alumni Association had made application for and received the Alumni Badge, viz.: Hudson DeMott Fowler, '94, Collinwood, Ohio ; Leon F. Luburg, '96, corner Seventh and Arch Streets, Philadelphia ; Frank P. Semmel, Jr., '96, 639 Hamilton Street, Allentown, Pa.

The Secretary reported the following deaths of members of the Association :

Oliver Brown Wolff, '92, died at Dry Run, Pa., on Tuesday, August 25, 1896, aged thirty-three years. He joined the Alumni Association April 19, 1892.

Jacob A. Schiedt, '72, died at Upsal Station, Germantown, Philadelphia, on Saturday, January 9, 1897, aged forty-seven years. He joined the Alumni Association March 5, 1874.

Wm. Tag, D.V.S., '81, died at 2235 Berks Street, Philadelphia, on Tuesday, January 12, 1897, aged thirty-six years. He joined the Alumni Association March 14, 1881.

The following deaths are those of graduates who were not active members of the Association :

Jacob Dunton, '55, died at Germantown, Philadelphia, on Monday evening, January 18, 1897, aged sixty-two years.

Jacob Cathcart Keys, '83, died at 2523 Bancroft Street, Philadelphia, on Friday, December 11, 1896, aged thirty-five years.

Robert Shoemaker, First Vice-President of the College and honorary member of the Alumni Association, died at 1736 Green Street, Philadelphia, on Thursday, December 17, 1896, aged eighty years.

A communication was read from Harry Baker Kantner, '89, and Herbert Wilkinson Turner, '90, who are in business in Altoona, Pa., and whose store was destroyed by a fire on December 19, 1896, that burned up their Alumni Certificates, desiring new ones. The Secretary stated that he had forwarded to them a copy of the by-laws, marking the section in reference to destroyed or lost certificates, but had not received any reply as yet. On motion, the request was filed.

A communication was also received from John S. Billings, Director of the New York Public Library (Astor, Lenox and Tilden foundations), requesting several back numbers of the ALUMNI REPORT, which were desired to complete the files in order to have them bound. The Secretary stated that he had complied with the request.

The Secretary reported receiving acknowledgments from certain public institutions who had received the ALUMNI REPORT, as follows :

R. Carnett, Keeper of the Department of Printed Books, British Museum, London, W. C., acknowledging the receipt of No. 9, Vol. XXXII, and 1 to 4, Vol. XXXIII.

New York Public Library (Astor, Lenox and Tilden foundations), J. S. Billings, Director, for the receipt of thirteen copies of the REPORT to complete their files ; also a letter from the director thanking the Association for the donation.

Washington State Library, Olympia, Washington, Geo. A. Kennedy, State Librarian, for No. 3 of Vol. XXXIII.

Bulletin de la Societe Royale de Pharmacie de Bruxelles, No. 12 for December, 1896, and No. 1 for January, 1897.

On motion, the meeting adjourned.

* * *

The fifth stated meeting of the Executive Board of the Alumni Association was called to meet at the College on April 1, 1897.

The following members were present : Dr. J. L. D. Morison, Harry L. Stiles, Wm. E. Krewson, F. Wm. E. Stedem, and Theodore Campbell.

Communications were received from Cornelius E. Spenceley and J. W. England, regretting inability to be present. There being less than a quorum present, it was, on motion, resolved to adjourn the meeting until Saturday afternoon, April 10, 1897, at 2 o'clock.

* * *

An adjourned meeting of the Executive Board was held April 10, 1897, in Alumni Hall.

The roll was called, and the following members were present, viz.:

Dr. J. L. D. Morison, Harry L. Stiles, James C. Perry, Wm. L. Cliffe, Wm. E. Krewson, F. Wm. E. Stedem, J. W. England, C. E. Spenceley, C. Carroll Meyer, Wm. A. Bullock, and Theo. Campbell.

On motion, the reading of the minutes of the previous meeting was dispensed with.

Secretary Krewson reported that he had paid over to the Treasurer since the previous meeting of the Executive Board the following amounts:—Sale of syllabus, $17.75; percentage on class pins, $3.91; badge, $6.00, and membership fees, $15.00, a total of $42.66.

The Secretary also reported that the Business Manager of the ALUMNI REPORT had paid over to the Treasurer $752.29 since the previous meeting.

The Treasurer reported that he had received since the previous meeting, from various sources, the sum of $794.95, which, with the balance in the treasury, at the close of the previous meeting, of $124.01, amounted to $918.96, and that he had paid out orders amounting to $842.56, which left a balance in the treasury of $76.40.

On motion, the reports of the Secretary and Treasurer were accepted.

The Finance Committee reported that the Treasurer had received since the February meeting of the Executive Board, from all sources, $794.95, which, with the previously existing balance of $124.01, made the total available sum of $918.96. The committee also reported that it had approved of bills since the February meeting amounting to $561.71, which, added to the balance of the bills approved and unpaid at the last meeting, $280.85, made a total in expenditure of $842.56, which the Treasurer has paid. The balance in the treasury was $76.40.

On motion, the report of the Finance Committee was accepted and their action in approving the bills was sustained.

The Secretary then read the bills approved, amounting to $561.71, and on motion, the usual orders were directed to be drawn for the amounts.

The Historical Committee reported progress.

The Edward C. Jones Memorial Committee reported that they had received, since the last meeting of the Executive Board, $32, making the total amount of cash in the Fund at this date $607.

The Secretary reported that fifty-seven of the last graduating class, who were members of the College Review Quiz Class, had passed the examinations successfully, and were, therefore, members of the Alumni Association. He read the following list:

Harry B. Althouse, Ralph Anderson, Newton Clair Baker, John Phillips Bates, Alphonse Peter Breithaupt, Albert Sylvester Brumbaugh, Samuel Clarence Clapp, Jr., Edward S. Clark, Norman Henderson Cloud, Simon Jacob Codori, Jr., Richard Hal Compton, Morris Cooper, Edward Ott Criswell, Clarence Derbie Eschbach, Levi James Farley, Joseph Miller Garrison, Jr., Otice Eugene Gansford, Swain T. Godfrey, Samuel R. Godshall, Chas. Rumney Goodfellow, Paul Herbert Gross, Hamilton Maxwell Harry, Christian Heim, Jr., Harry Lewis Horst, Harvey Field Howell, Oscar K. Hukill, David Strode Jefferis, Isaac Astor Jennings, Frank James Johns, Lawrence Anthony Kessler, Chas. Clarence Hagenbach Kirlin, George Henry Kramer, Albert Russell Laughlin, Enos Samuel Lenhart, Walter Levan, Daniel Wm. Lewis, Chas. Frederick Liebert, Theo. Elmer Longshaw, Frederick A. Luhr, Hanford Bell McGehee, Claude Dallas Metzler, Harry Matusow, Clayton Edward Morgan, Chas. Wm. Nebel, Edward Parry, Wm. Hough Parry, Samuel Robert Pearce, Walter Francis Praul, Laura Marguerite Smiley, Henry Aloysius Stommel, Austin Streeper, Isaac Herbert Tobias, John Isaac Peter Troxell, Sue C. Weitzel, Hartman Gotthard Wentzler, Samuel Wetzel, Oliver Fawcett Wilson and John Bowman Winger.

The Secretary also reported that the following graduates—all members of the Class of 1897—had joined by paying the required fee:

Charles August Mueller, 2520 Bancroft Street, Philadelphia; Howard Eugen Ingling, Riverton, N. J., and Charles Baker Lukens, 1724 North Eighteenth St., Philadelphia.

On motion, the Secretary was authorized to cast the unanimous vote of the Association for the applicants.

The ballot was cast and the President declared the applicants duly elected.

The Secretary reported that Frank James Johns, '97, had made application and procured the Alumni Badge.

The Secretary offered the following resolution, which was unanimously adopted, viz.:

Resolved, That the Alumni Association present hereafter a Testimonial Prize Certificate to the Second Course Student receiving the highest general average in the second year examinations, —similar to the one now presented to the Junior Student—and that hereafter these prizes be designated as Testimonial Prize Certificates to the undergraduates receiving the highest general average in the first and second class examinations respectively.

Wm. A. Bullock moved that the Secretary be requested to procure estimates for engrossing Alumni Membership Certificates. It was so ordered.

The Committee on Reception to the Graduating Class reported that, as the graduating exercises this year were to be held in the College Auditorium, the committee deemed it advisable to hold the Reception there also, and that they had engaged Bastert's Orchestra for the occasion.

On motion, their action was sustained.

The following deaths of members of the Association since the previous Executive Board Meeting was reported, viz.:

Albert D. Wike, '67, died at Marietta, Pa., February 24, 1897, aged 32 years. He joined the Alumni Association April 15, 1882.

James Clavin, '89, died at his home, San Antonio, Texas, on March 19, 1897, aged 31 years. He joined the Alumni Association March 15, 1889.

Frederick G. Hertel, '89, died at Philadelphia, on March 14, 1897, aged 29 years. He joined the Alumni Association March 15, 1889.

John P. Ross, '87, died at his residence, Seventeenth and Cherry Streets, Philadelphia, April 17, 1896, aged 32 years. He became a member of the Alumni Association March 17, 1887.

The Secretary also reported the deaths of the following graduates, not active members of our Association, viz.:

Dr. Wm. B. Spence, '83, died at 1615 Franklin Street, Philadelphia, on Saturday, March 13, 1897, aged 35 years.

Wm. H. Faunce, '81, died at northeast corner Palmer Street and Girard Avenue, Philadelphia, on March 14, 1897, aged 38 years.

The Secretary also officially announced the death of Prof. Edson Sewell Bastin, which occurred at the Medico-Chirurgical Hospital on Tuesday morning, April 6, 1897, aged 51 years. The funeral was held on Friday, April 9, at Merchantville, N. J., and was largely attended by members of the Alumni Association and students of the College.

The Secretary stated that there had been returned the notices of the annual meeting of Eugene B. Bronson, '68, and Byron Edwin Bruenchenheim, '83, both marked "deceased," but no date of death or other information has yet been received.

The Secretary read a communication from Mrs. Wm. K. Mattern, widow of Dr. Wm. K. Mattern, '73, thanking the Association for the memorial of her late husband, and stating she greatly appreciated it.

On motion, the letter was ordered filed.

The Secretary reported that he had received a communication from F. T. Aschman, Librarian of the Pittsburg College of Pharmacy, acknowledging the receipt of the ALUMNI REPORT, which had been placed on file and made accessible to the students of the Pittsburg College.

J. W. England offered the following resolution, which was adopted:

"That the Committee on Alumni Chapter be directed to inquire into the possibility of securing the use of the Aimwell School Property—with the consent of the Board of Trustees of the College—for the work of the Alumni Chapter and the use of the students of the College."

The Secretary reported the following students as receiving the highest averages in the various branches, and were entitled to receive the Alumni Prizes at the annual reception, to be given April 12, viz.:

Gold Medal.—Clayton Edward Morgan, of Philadelphia.

Prize Certificates.—Pharmacy, John Phillips Bates, of Mansfield, Pa.; Chemistry, Walter Francis Praul, of Philadelphia; Materia Medica, Harry Matusow, of Minsk, Russia; General Pharmacy (Committee), Samuel Robert Pearce, of Manasquan, N. J.; Opera-

tive Pharmacy, Oliver Fawcett Wilson, of Pittsburg, Pa.; Analytical Chemistry, Albert Sylvester Brumbaugh, of Mansfield, Ohio; Pharmacognosy (Specimens), Claude Dallas Metzler, of Harrisonville, Pa.; Microscopy (Vegetable Histology), Miss Laura Marguerite Smiley, of Philadelphia, Pa.

First Course Prize Certificate.—Melvin William Bamford, Reading, Pa.

Second Course Prize Certificate.—George Carl Keen, Vineland, N. J.

On motion, the Secretary was instructed to have the Certificates prepared, and the President was authorized to see that they were presented to those entitled to receive them.

There being no further business, the final meeting of the Executive Board of 1896-97, on motion, adjourned.

Examination Questions of the P.C.P., 1896=97

FIRST YEAR EXAMINATION.

PHARMACY.

A—Crystallization.—(1) Describe the method of obtaining crystals by deposition from supersaturated solution. (2) Define pellicle. (3) Water of crystallization. (4) Interstitial water. (5) Efflorescence. (6) Deliquescence. (7) Mother liquor. (8) What is intermediate crystallization?

B—Syrups.—(1) Define syrups. (2) Name five methods for official syrups. (3) What kind of sugar is best adapted for making syrups, and give the reasons for preferring this kind of sugar. (4) Describe a method of preserving fruit juices in bottles, and state the causes which lead to the decomposition of solutions containing organic matter, if not protected.

CHEMISTRY.

C—Halogen Group.—(1) Enumerate the elements belonging to the Halogen group, and briefly describe the physical appearance of each of them. (2) Give the formulas of their hydrogen compounds, and state which of them are official compounds. (3) Write a chemical reaction for the production of one of these elements and a chemical reaction for the production of one of the hydrogen compounds above mentioned.

D—Phosphorus.—(1) Describe the element phosphorus in its several forms. (2) From what sources do we obtain it, and what are its practical uses? (3) Give the chemical formula for hydrogen phosphide, and state how it is obtained.

BOTANY.

E—(1) In what group of plants are the sporophyte and gametophyte generations nearly equal in development? (2) In flowering plants, what two kinds of spores are produced, and in what organs are they borne respectively? (3) In most of the higher plants, into what organs are root and shoot differentiated? (4) Define the terms sporophyll and hypsophyll, and give examples of each as they occur in the flowering plant. (5) What are the microsporangia and macrosporangia commonly called, respectively, in the flowering plant? (6) What peculiarities in the leaf venation and in the numerical plan of the flowers enable us, usually, to distinguish a monocotyl from a dicotyl? (7) Name examples of each of the following kinds of fruits: a syconium, a drupe, a legume, a pepo, and an akene.

F—Materia Medica.—(8) Describe uva-ursi as to the following points: length, shape, surfaces, venation, margin, texture, taste, a medicinal constituent, and the chief use of the drug. (9) Name two official leaves which possess internal glands. (10) State the important structural differences between German and Roman chamomile.

COMMITTEE.

G—Glycerin.—(1) Name three principal reasons showing its value in pharmacy. (2) What official class of preparations contains glycerin as a base? (3) What is glycerin, and what is its principal use?

H—Chemical Terms.—Write concise *definitions* of each of the following chemical terms:

(1) matter; (2) elements; (3) atoms; (4) atomic weight; (5) equivalence or valence; (6) molecules; (7) molecular weight; (8) equation; (9) chemical reaction; (10) acids.

I—Problem.—A laboratory formula called for 8·5 kilos of 50 per cent. orthophosphoric acid. How much of the U. S. P. phosphoric acid (85 per cent.) would be required to take its place in the formula? Show the figures used to obtain your result.

K—The Flower.—(1) Define the term sporophyll. (2) State what two kinds of sporophylls occur in the flowers of most of the higher plants. (3) State what they are commonly called, respectively, and what is the function of each. (4) State, also, what other modified leaves the flower may possess.

OPERATIVE PHARMACY.

(*1*) *Specific Gravity.*

Determine the specific gravity of the liquid contained in the four-ounce bottle; put all calculations on the sheet of paper, with your name and examination number.

(*2*) *Percolation.*

Percolate 100 grammes of gentian with 500 c.c. of water. Label the percolator with your name and examination number.

(*3*) *Granulated Salt.*

Acid Salicylic	7 gm.
Sodium Carbonate, C.P., . .	6·5 gm.
Distilled Water q. s.	

Make Sodium Salicylate. Put in the wide-mouth bottle.

PHARMACOGNOSY.

In this branch each student was given specimens of ten official vegetable drugs, and was required to give the official name and common names, if any, and also describe the chief characteristics of each specimen.

SECOND YEAR EXAMINATION.

PHARMACY.

A—(1) What is the official name for Solution of Hydrogen Dioxide? (2) What is the synonym? (3) What is the official description? (4) Give a brief outline of the process for preparing it. (5) What are its uses?

B—(1) What is the official name for Solution of Ferric Chloride? (2) What is the official description? (3) Give a brief outline of the process for preparing it. (4) If the finished solution has a blackish tint, what is it due to? (5) How may this be removed?

C—(1) What is the official name for Ether? (2) What is its specific gravity? (3) How is it made on the large scale? (4) What are its physical properties and uses? (5) Is Ether vapor heavier or lighter than air?

D—(1) Explain the natural changes which occur in the pulpy constituents of unripe fruits during ripening. (2) Have fleshy roots any of the constituents of unripe fruits? If so, name them. (3) Explain the reasons for adding ammonia-water to preparations of glycyrrhiza and senega. (4) How do acids and heat affect the constituents of fleshy roots?

E—What are the essential points of difference between a volatile oil and a fixed oil? By what test may one be distinguished from the other? What is oleic acid? How is it prepared? What are its uses in pharmacy and medicine? Describe the manufacture of Soap? What is Sapo Mollis? How is it prepared? What is Castile Soap chemically? And what useful by-product results from the manufacture of Soap?

CHEMISTRY.

F—(1) Give the reactions for the production of Sodium Carbonate by the Leblanc process. (2) Give the reactions for the production by the Ammonia-Soda and Cryolite processes. (3) State what are the by-products in each of these processes and which of them are of value.

G—(1) Describe the metal Copper and state from what ores it is obtained. (2) Describe *Cupri Sulphas*, U.S.P. What is the change of appearance effected in it by prolonged heating? What is the result of the addition of aqua ammonia to copper sulphate solution? (3) Mention the more important alloys of copper, stating the several components of each.

H—(1) How is the metal Aluminum obtained? (2) Give the chemical formula of *Alumen*, U.S.P. (3) Describe silicate of aluminum and state its uses.

I—(1) Describe the more important tests for the detection of Arsenic. (2) How would you

distinguish Arsenic from Antimony in these tests? (3) Describe *Acidum Arsenosum*, U.S.P.; give its chemical formula and its common name.

K—(1) Enumerate the several varieties of glass and state their approximate chemical composition. (2) What is "soluble glass?" (3) Mention some of the materials used in coloring glass?

MATERIA MEDICA AND BOTANY.

L—Tissues.—(1) Enumerate the different kinds of tissues found in plants. (2) Define meristem and state how its cells differ from ordinary parenchyma cells. (3) In what parts of an ordinary tree, such as the elm, for example, does meristem occur? (4) State how the wall of an ordinary parenchyma cell, that of an ordinary epidermal cell, and that of an ordinary wood fibre, differ from each other in their chemical and physical properties.

M—The Structure of Stems, Roots and Leaves.—(5) In what respect does the growing tip of a Fern stem differ from that of a Dicotyl stem? (6) What three layers are recognizable at the growing tip of a Dicotyl stem, and into what regions do these layers develop, respectively, as the stem matures? (7) What kind or kinds of vasal bundles are characteristic in each of the following organs: the root of Sarsaparilla, the trunk of a Pine, the stem of Lycopodium, the rhizome of Aspidium, and the stem of the Pumpkin? (8) Define the terms centric, bifacial and iso-bilateral, as applied to leaves.

N—Root and Rhizome Drugs. (9) Write the *official name*, the *common name*, the *natural order*, *botanical name*, the *name of the country* from *which derived*, the *most important chemical constituent*, and the *most important medicinal property* of each of four official root-drugs. (10) Write the official names of two root-drugs which contain milk-tissue. (11) Name two official root-drugs that owe their activity to poisonous alkaloids, giving also the name of the alkaloid in each case. (12) Name two root-drugs and one rhizome-drug, all of which are official and all characterized by an intensely bitter taste.

O—Root and Rhizome Drugs.—(13) State the sources of each of the following principles, giving the official name of the drug in each case: *Leontin*, *Chelerythrine*, *Sylvacrol*, *Atropine*, *Chrysophan*, *Emetine*, *Pelosine*, *Filicic Acid*, *Jervine*, and *Aristolochine*. (14) Name four official drugs belonging to the groups of Roots and Rhizomes that are powerful narcotic poisons. (15) Describe the structure of Belladonna Root. (16) Write the official names of each of the following drugs: Pinkroot, Blue Cohosh, Mayapple, Cranesbill and Marshmallow.

P—Barks, Woods, etc.—(17) Name three official barks, each of which possesses three layers, and three others, each of which consists of the inner layer only. (18) What official bark is very tough and flexible, has silky bast fibres, is very sternutatory when powdered, is acrid to the taste, and is capable of producing a blister when moistened and applied to the skin? (19) Name two official barks which have short and rigid bast fibres, two which possess long and flexible ones, and two that possess none. (20) Name an official bark that is *febrifuge*, one that is *pectoral*, one that is *taenifuge*, one that is *cathartic*, and one that is *demulcent*.

SPECIMENS FOR RECOGNITION.

(1) Acidum sulphurosum. (2) Plumbi oxidum. (3) Sodii hyposulphis. (4) Alumen. (5) Plumbi acetas. (6) Belladonnæ radix. (7) Podophyllum. (8) Aspidosperma (Quebracho). (9) Eriodictyon (Yerba Santa). (10) Strophanthus seeds. (11) Pulvis rhei compositus. (12) Aqua chloroformi. (13) Spiritus juniperi compositus. (14) Emulsum chloroformi. (15) Tinctura calumbæ.

SENIOR EXAMINATION.

THEORY AND PRACTICE OF PHARMACY.

Put down on your paper all the figures used in making your calculations.

A—How many fluid ounces are there in a kilogramme of each of the following official liquids? (1) Water. (2) Hydrochloric acid. (3) Ether. (4) Syrup. (5) Diluted Alcohol.

B—Give the unabbreviated official name; ingredients in preparing; describe the appearance of—(1) Compound Infusion of Gentian. (2) Fluid Extract of Ginger. (3) Soap Liniment. (4) Compound Syrup of Rhubarb. (5) Spirit of Peppermint. (6) Emulsion of Chloroform. (7) Compound Extract of Colocynth. (8) Plummer's Pills.

C—Give the English name, ingredients, and brief outline of process of the following: (1) Calx Sulphurata. (2) Argenti Nitras Fusus. (3)

Ferri et Strychninæ Citras. (4) Emplastrum Plumbi. (5) Pilulæ Ferri Carbonatis. (6) Unguentum Aquæ Rosæ. (7) Pulvis Purgans. (8) Spiritus Glonoini.

D—(1) What is Monsel's Solution? (2) How is it prepared? (3) What are its uses? (4) What antidote is prepared from it? (5) How is the antidote made? (6) How is the antidote administered?

E—(1) How is Chloroform prepared? (2) What is its specific gravity? (3) What are its uses? (4) What is the official test for purity? (5) How is it preserved? (6) Is its vapor inflammable? (7) Name three official preparations in which Chloroform is used.

F—(1) What is Copaiba? (2) What are its constituents? (3) What official preparation is made from Copaiba? (4) Give the process for this preparation. (5) How is this preparation administered? (6) What is the dose?

G—(1) What is Chocolate? (2) How is it made? (3) What is the official name of the fatty constituent? (4) What is the English name of this constituent? (5) How is this constituent prepared? (6) What are the pharmaceutical uses of this constituent? (7) What is its melting point?

H—(1) Describe the apparatus for making Compressed Pills. (2) What are the advantages of Compressed Pills? (3) What are the disadvantages? (4) How are Tablet Triturates made? (5) How are Tablet Saturates made?

I—Criticise the following prescriptions. Write out the English name of each ingredient; state how you would compound each, and if any incompatibility would be developed in either. state what it is, and what would be the proper procedure.

℞ Chloral Hyd. . . . . gr. xl
Camph. Pulv. . . . . gr. x
Syr. Zingib. . . . . f ʒij
Aquæ ad. . . . . f ℥ij
M. ft. Solutio.
S. A teaspoonful every three hours.

℞ Ferri et Quin. Cit. . . . . .
Ammon. Carb. . . . . āā ʒj
Sp. Ammon. Arom. . . . . ʒiv
Tinct. Opii . . . . . ʒij
Aquæ ad . . . . . ℥viij
M. ft. S. One teaspoonful three times a day. A.

K—Criticise the following prescriptions. Write out the English names, with ingredients and quantities; state whether you would compound them as written, or what course you would pursue upon receiving them.

℞ Quinin. Sulph. . . . . gr. j
Ext. Nucis Vomicæ . . . . . gr. v
Morph. Sulph. . . . . gr. viij
M. ft. pil. No. x.
Sig. One pill every three hours.

℞ Potass. Permang. . . . . ʒj
Alcohol . . . . . ℥j
Glycerin . . . . . ℥ij
M. ft.
Sig. Use as directed. X.

CHEMISTRY.

A—(1) What are the native sources of Borax? Give the chemical formulas for *Sodii Boras* and for *Acidum Boricum*. (2) How would you prepare Borax from Boric Acid? (3) How would you prepare Boric Acid from Borax? (4) Give the most characteristic tests, both physical and chemical, for both these compounds.

B—(1) Describe the metal Sodium. (2) Give two of the methods used for its production. (3) Give the formulas of *Sodii Chloridum*, *Sodii Chloras*, *Sodii Hyposulphis*, *Sodii Phosphas*, and *Sodii Hypophosphis*. (4) What are the analytical tests for Sodium and its Salts?

C—(1) What are the chief ores of Zinc, and how is the metal obtained from them? Describe the metal, and enumerate its properties, both physical and chemical. (3) Mention the uses of Zinc, and state which alloys of it are of practical value. (4) Give the names and formulas of the official Salts of Zinc.

D—(1) Give the formula of *Acidum Chromicum*. (2) Give the formula of *Potassii Bichromas*, and of the normal Potassium Chromate, and explain the chemical difference between these formulas. (3) What takes place when an excess of Sulphuric Acid is added to a concentrated aqueous solution of Potassium Bichromate? (4) What takes place when an alkaline hydrate solution is added to a solution of *Potasii Bichromas?* (5) What pigments may be formed from Potassium Bichromate?

E—(1) Write the chemical formulas of—*Ferri Chloridum*, *Ferri Oxidum Hydratum*, *Ferri Sulphas*, *Ferri Hypophosphis*, *Potassii Ferrocyanidum*, *Ferri Lactas*. (2) State by

what tests Ferrous Salts can be distinguished from Ferric Salts. (3) State how a Ferrous Compound can be converted into a Ferric one.

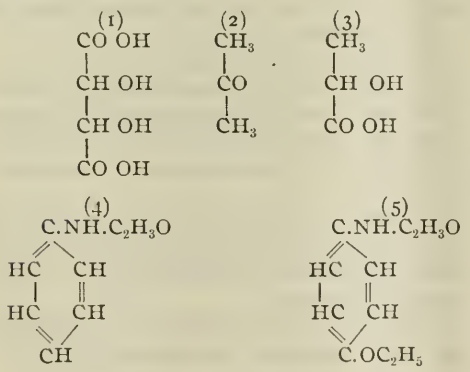
F—(1) Give the general formulas for the Paraffin, the Olefine, and the Benzene series of Hydrocarbons. (2) State the occurrence in nature or conditions of artificial formation of each of these series. (3) How could you distinguish, by chemical tests, between these three series?

G—(1) Name an official compound belonging to the class of Triatomic Alcohols. (2) State the source of the compound and how it is prepared from the naturally occurring products. (3) Write the reaction for its production from one of these substances. (4) Name the other products of the reaction just referred to.

H—(1) Write the graphic formulas of *Alcohol*, *Chloral*, *Acidum Carbolicum*, *Acidum Benzoicum*, and *Acidum Gallicum*.

I—(1) What is Phenol? (2) Name such official compounds as belong to the class of Phenols, and write their graphic formulas. (3) What is a Phenol Acid? (4) Name such official compounds as belong to the class of Phenol Acids, and write their graphic formulas.

K—(1) Name the compounds indicated by graphic formulas, and where official give both chemical and official names.



MATERIA MEDICA.

(1) Name and describe the different forms of Proteid that may exist in a cell.

(2) State how a wall of a cell may vary in composition.

(3) What are the distinctive characteristics of Meristem Tissue?

(4) Describe the characteristics of Epidermal Tissue and name its varieties.

(5) Under what circumstances is the Epidermis not cutinized?

(6) Describe the structure and state the use of a Stoma. How are Stomata distributed on the plant?

(7) Describe the usual form or shape of Chloroplast and their mode of increase.

(8) What relation does Chlorophyll bear to Chlorophyll Bodies, and of what use to the plant is Chlorophyll?

(9) What are Conjoint Fibro-Vascular Bundles?

(10) What kind of bundles are characteristic of the following stems: The Fern, the Lycopodium, the Equiseteum, the Monocotyl, and the Dicotyl?

(11) Write such a description of Aconitum as would serve for its certain identification.

(12) Name one of the most important structural characteristics of each of the following drugs: Taraxacum, Senega, Rheum, Cimicifuga, and Cinchona Calisaya.

(13) How, without aid from the senses of taste and smell, may Serpentaria be distinguished from Spigelia?

(14) By what chemical test may Guaiac Wood be readily recognized?

(15) By what simple test may chips of Red Saunders be readily distinguished from those of Logwood?

(16) By what simple means may Granatum be easily distinguished from other drugs?

(17) Name three official barks which are destitute of bast fibres.

(18) Name three official barks that consist of the inner layer only.

(19) In the botanical classification of fruits, to what group do each of the following belong: Colocynth, Prunum, Fœniculum, Piper Nigrum, and Cardamomum?

(20) Name three official seeds that are albuminous and three that are exalbuminous.

(21) Write the botanical name and natural order of Crocus, and state what part of the plant is official.

(22) Name an acid and three important alkaloids found in Opium. Name an acid and three important alkaloids found in Cinchona.

(23) Write the botanical name and natural order of the plants from which each of the following drugs is derived: Elaterium, Manna, Opium, Guarana, and Zea.

(24) Name the source of each of the following

alkaloids: Thebaine, Emetine, Pelosine, Chelerythrine, Cornutine, Menispine, and Hygrine.

(25) Name the source of each of the following non-alkaloidal principles: Meconic Acid, Rottlerin, Chrysophan, Cathartic Acid, Saponin, Elaterin, and Rhamnoxanthin.

(26) Name five official drugs that are powerful hydragogue cathartics.

(27) Name three powerful drugs that act as tonics to the heart, strengthening its beat; and three that powerfully depress the heart's action.

(28) Define the terms Cholagogue, Antiseptic, Antiperiodic, Mydriatic, and Anthelmintic.

(29) What are the most marked symptoms of opium poisoning, and what treatment is indicated?

(30) Name two powerful official drugs which, in medicinal doses, stimulate the respiratory function.

COMMITTEE.

A—(1) A solid body weighs 50 ounces in the air and 30 ounces in water. What is its specific gravity? (2) What is the volume of the body? (3) What is the weight of an equal volume of water? (4) What would it weigh if it were immersed in official Glycerin? (5) If two avoirdupois pounds of official Sulphuric Acid were poured into a measure graduated to show fluid ounces, to what number would it be filled?

B—*Asafœtida.*—(1) Give botanical name, natural order, and habitat of the plant which yields Asafœtida. (2) Describe the characteristics of the natural order to which the plant belongs. (3) What appearance does the drug present in commerce? (4) Why does it form an emulsion when mixed with water? (5) What are its chief constituents, and to what is its odor due? (6) Name three official preparations of Asafœtida. (7) Give the dose of Asafœtida.

C—*Materia Medica.*—Belladonna Root. (1) Enumerate the characters by means of which Belladonna Root may be distinguished from any other official root. (2) What is the important alkaloid of Belladonna? (3) What is the most characteristic constitutional effect of Belladonna or of its alkaloid? (4) What is the dose of Belladonna Root? (5) Name the official drugs which, in physiological action, are closely related to Belladonna. (6) Why is the official name *Belladonna Radix* and not *Belladonna?*

D—(1) Name five official Fixed Oils, giving the Latin and English titles. (2) Describe briefly the processes for making the fixed oils of commerce used medicinally. (3) Name five official volatile oils, giving both Latin and English titles. (4) Describe briefly three processes by which volatile oils are procured.

E—(1) Give Symbol, Equivalence and Atomic Weight of the metal Magnesium. (2) What two kinds of Magnesium Oxide are official, and how is each made? What is the essential difference in chemical reaction with water between the two? (3) Which variety of Magnesium Carbonate is the official? (4) Give the chemical reactions that take place in making Liquor Magnesii Citratis.

F—(1) Give the antidotes for the following poisons: Arsenic, Corrosive Sublimate, Oxalic Acid. (2) What antidote would you administer for a corrosive liquid of unknown identity? (3) For what class of poisons are antidotes usually unavailing? In such cases how may the patient's life be saved?

G—*Strophanthus.*—(1) Give its official name; botanical name. (2) To what region is it indigenous? (3) What is the active principle of Strophanthus? (4) What is the dose of Strophanthus? (5) What preparation of Strophanthus is official? (6) Give the dose of this preparation. (7) What are the medical properties of Strophanthus?

H—The molecular weight of *Crystallized Alum* is 946·46, and that of *absolutely dry Sodium Carbonate* is 105·85. How much of the Sodium Carbonate would be required for 1 kilogramme of Alum in the manufacture of *Aluminum Hydrate?*

I—Complete prescription No. 1 by inserting the quantities of the several ingredients, the patient being an adult and suffering from a mild dropsical condition.

Write out, in an unabbreviated form, what you would dispense in prescription No. 2.

1.

℞ Potass. Acetat. . . . . .
Infus. Digitalis . . . . . .
Ext. Tritici Fluid . . . . . .
Spt. Æther Nit. . . . . .
Infus. Buchu . . . . . .
M. Sig. Take a tablespoonful three times a day for four days.

2.

℞ Pot. Chlor. . . . . ℥j
Aq. Chlor. . . . . f℥iv
Spt. Syr. Nig. . . . . f℥ij
Syr. Zingib. . . . . q. s. ad ℥viij
M. Sig. Tablespoonful every two hours until relieved.

K—(1) Write a metric prescription for 100 pills, each to contain one-eighth grain Morphine Sulphate, one-sixtieth grain Strychnine Sulphate, and one-twelfth grain Arsenous Acid, with the quantity of a suitable excipient, expressed metrically, to make one-grain pills.

(2) Translate the following prescription, giving the equivalents in apothecary's system:

GERMAN PRESCRIPTION.

℞ Chloroform . . . . . 50·
Ætheris . . . . . 60·
Ol. Sesami . . . . . 130·
M. ft. Liniment.
S. Use externally.

SPECIMENS.

The following specimens were placed before the Senior students for recognition during the several examinations:

Pharmacy.

Aqua creosoti,
Spiritus ætheris nitrosi,
Spiritus ætheris compositus,
Ceratum plumbi subacetatis,
Pulvis ipecacuanhæ et opii,
Extractum sennæ fluidum,
Tinctura benzoini composita,
Syrupus ferri iodidi,
Extractum cinchonæ fluidum,
Tinctura calumbæ.

Chemistry.

Aqua destillata,
Amylum,
Sodii salicylas,
Naphtaliuum,
Sodii bicarbonas,
Sodii acetas,
Saccharum lactis,
Mangani dioxidum,
Potassii nitras,
Benzinum.

Materia Medica.

Bryonia,
Stillingia,
Geranium,
Calamus,
Euonymus,
Salvia,
Chenopodium,
Conium,
Physostigma,
Colchici semen.

Committee.

Tinctura cardamomi composita,
Linimentum chloroformi,
Extractum ergotæ fluidum,
Extractum gentianæ fluidum,
Potassii bicarbonas,
Zinci acetas,
Ammonii chloridum,
Senega,
Guaiaci lignum,
Cascarilla.

OPERATIVE PHARMACY.

(*1*) *Ointment of Mercuric Nitrate.*

Mercury . . . . . 2·5 gm.
Nitric Acid . . . . . 2· c.c.
Nitric Acid . . . . . 3· c.c.
Lard Oil . . . . . 30· c·c.

Make Ointment of Mercuric Nitrate by the official process.

(*2*) *Pills.*

Ferric Citrate . . . . . 3· gm.
Cinchonine Sulph. . . . . 1· gm.
Oil of Caraway . . . . . 15 drops.

Mix; make 15 pills.

Write in English, upon the label, all the ingredients and quantities used in making the pills, and put the label on the bottom of the box.

(*3*) *Suppositories.*

Ext. Belladonna Leaves . . . ·50 gm.
Tannic Acid . . . . . ·50 gm.
Oil of Theobroma . . . . . 6·00 gm.

Make 6 suppositories, by rolling.

(*4*) *Prescription.*

Put up a prescription, *secundum artem*, each teaspoonful dose of which shall contain five minims each of Tincture of Guaiac and Spirit of Nitrous Ether, with sufficient water to make two fluid ounces. Write upon a separate label the contents of the bottle, and attach it.

(*5*) *Plaster.*

Spread a breast-plaster, about 6 inches in

diameter. Soap plaster will be found in the dipper.

ANALYTICAL CHEMISTRY.

(*Students of the second-year class were also given this examination.*)

The examination in this branch consisted in the examination of a compound powder for metals and inorganic and organic acids.

VEGETABLE HISTOLOGY.

(*Students of the second-year class were also given this examination.*)

(1) To which of the following plant types does the specimen belong: The Fern, the Monocotyl, the Gymnosperm, or the Dicotyl? (2) Which of the following organs does it represent: a root, the petiole of a leaf, or a stem? Give the reason for your conclusion. (3) Make a diagram of the cross-section and locate such of the following parts as are represented: the epidermis, the periderm, the pith, the cambium zone, a medullary ray, the xylem of a bundle, the endodermis, and the pericycle. (4) Enumerate the tissues which you find present. (5) Is starch present? What test did you employ to determine? In what parts of the section is it most abundant? (6) What tissues are lignified? In what part of the section were the lignified tissues most abundant? Describe your method of testing for lignified structures. (7) What varieties of secretion tissue do you find, and how are they distributed? (8) If milk tissue is present, state which variety it represents and how it is distributed. (9) For clearing sections of starch and proteid matters, what reagents may be employed? (10) Suppose you find crystals in a cell, by what means could you tell whether they are protein or mineral crystals? Having determined that the crystals are inorganic, how could you tell whether they are composed of calcium carbonate or of calcium oxalate?

Our Graduates.

(In order to make this department of the REPORT as generally interesting as possible, the graduates of the Philadelphia College of Pharmacy are requested to send items of information concerning graduates to the editor of the REPORT. By so doing, they can keep in social touch with fellow-graduates and renew the friendships of college days.)

MEMORIAL ROSTER.

Hepler—On April 11, 1897, at 108 South Fourth Street, Reading, Pa., Wm. Clous Hepler, '88, aged 30 years.

Phillips—On April 19, 1897, at Zanesville, O., Wm. N. Phillips, '96, aged 23 years.

Tatem—On April 26, 1897, at 220 South Fifteenth Street, Philadelphia, Charles Henry Tatem, '75, aged 46 years.

Blackman—On Tuesday, November 10, 1896, at Lester-Shire, N. Y., Augustus S. Blackman, '92, aged 24 years.

Stern—On May 5, 1897, at Spring Valley, N. J., Charles Wilson Stern, '95, aged 28 years.

Davis—On May 23, 1897, at 1050 Germantown Avenue, Philadelphia, George H. Davis, '61, aged 55 years.

MARRIAGE ROSTER.

Zeller—Small. On April 3, 1897, at Factoryville, Wyoming County, Pa., Dr. Charles A. Zeller, '93, to Miss Emma H. Small.

Schnuerer—Wolf. On April 7, 1897, at Cleveland, O., J. Geo. Schnuerer, '93, to Miss Bird Wolf, daughter of Mr. and Mrs. Jas. Wolf. At home, 454 East Prospect Street, Cleveland, O., after May 1, 1897.

Albaugh—Falkner. On Thursday, April 15, 1897, at Franklin, O., Herbert Spencer Albaugh, '96, to Miss Grace N. Falkner.

Baer—Cornell. On June 3, 1897, at Broad and Green Streets, this city, Jacob M. Baer, '87, to Miss Helen Mar Cornell.

STORE CHANGES.

——Frank W. Ely, '94, has purchased a store at 16 East Third Street, Williamsport, Pa.

——Chas. L. Barrett, '89, and Wesley J. Barrett, '96, have purchased the store of Dr. Eugene De Grofft, at Sixth and Berkley, Streets, Camden, N. J.

——Pierce A. Dietrich, '96, has opened a new store at the northwest corner of Fifty-ninth and Haverford Avenue, Philadelphia. Reinle Brothers & Salmon, of Baltimore, furnished the fixtures.

——Cornelius E. Spenceley, '78, has sold his store at Seventh and Master Streets, this city, to the Test Brothers, has relinquished the drug business, and has entered into partnership with his brother-in-law, Harry Lee Barber, '84, in the real estate business, at 1113 Arch Street, this city.

IN MEDICAL PRACTICE.

——Dr. E. Q. Thornton, '89, has been elected a member of the Executive Committee of the Philadelphia Chapter of the Alumni Association of the Jefferson Medical College, this city.

——Dr. Frank Alleman, '93, formerly a resident physician at the Philadelphia Hospital, and later at the Emergency Hospital of Boston, Mass., was forced to relinquish the latter position a short while ago, on account of an attack of appendicitis. He came on to Philadelphia, went to the German Hospital, and underwent a radical operation. His many friends will be pleased to learn of his complete recovery from the attack.

CHANGED ADDRESSES.

——The following have changed addresses. Their addresses now are :

Robert C. Hall, '96, Franklin, Pa.

Francis X. Rhein, '94, Mansfield, O.

Dr. Saml. E. Ulmer, '95, Irvona, Pa.

Warner W. Flitcraft, '95, Salem, N. J.

James R. Light, '96, Lock Haven, Pa.

Miles R. Hess, '94, 2941 Fairhill Street.

David P. Schindel, '96, Shippensburg, Pa.

W. J. Berkstrasser, '93, Kennett Square, Pa.

Geo L. Genz, '96, 15 South Broadway, Aurora, Ill.

Wm. S. Warfel, '95, Wellsboro, Tioga County, Pa.

Jos. S. Clair, '96, 37 Broadway, Camden, N. J.

Edward F. Kessler, '91, 2400 Spring Garden Street.

Rush P. Marshall, '81, Monrovia, Los Angeles, Cal.

Dr. Saml. C. Webster, '85, 99 High Street, Westerly, R. I.

Edgar F. Haffner, '96, New Brunswick, N. J.

Julius H. Ulrich, '95, 709 Hayward Street, Peoria, Ill.

A. S. Brumbaugh, '97, 3400 Pine Street, Philadelphia.

Chas. A. Blumhard, '94, Second Avenue, Pine Bluff, Ark.

Edward R. Buehler, '64, 134 Lake Street, Chicago, Ill.

Ray W. Kottka, '93, Loyalton, Dauphin County, Pa.

Peter J. Rock, '95, 2963 Kensington Avenue, Philadelphia.

John J. Kelley, '94, 3124 Cumberland Street, Philadelphia.

Melmoth M. Osborne, '84, 908 Spruce Street, Philadelphia.

Saylor J. McGhee, '95, 1007 Walnut Street, Philadelphia.

Wm. H. Haake, '91, 795 Central Avenue, Cleveland, O.

Dr. Jos. A. McKee, '89, 1807 Eighth Avenue, Altoona, Pa.

Bentley B. Adams, '94, 204 Federal Street, Camden, N. J.

Edward Plummer, '75, 405 Fifth Avenue, New York City.

Dr. Charles E. Lack, '93, 450 Ninth Avenue, Brooklyn, N. Y.

Chas. M. Shumaker, '92, 742 Broadway Street, Council Bluffs, Ia.

Wm. B. Gleim, '83, 135 North Fifteenth Street, Philadelphia.

Edward MacInall, '68, 420 South Broad Street, Philadelphia.

James W. Cassell, '96, 1000 South Second Street, Philadelphia.

John J. Finney, '92, corner York and Natrona Streets, Philadelphia.

Herman F. Hahn, '92, 2221 North Third Street, Harrisburg, Pa.

David P. Schindel, '96, 47 South Potomac Street, Hagerstown, Md.

Frederick Chas. Brendel, '95, 375 Amsterdam Avenue, New York City.

Willie R. Stephen, '89, 2013 North Twenty-fifth Street, Philadelphia.

Robert H. Vansant, '79, in care of Ridington & Co., San Francisco, Cal.

Harry Lee Barber, '84, 2014 North Twenty-second Street, Philadelphia.

Dr. Robert A. Koempel, '76, 884 East 161st Street, New York City, N. Y.

Adam B. Heckerman, '96, 418 Penn Street, Huntingdon, Pa.

Wilmer P. Hoopes, '95, 1801 Magazine Street, New Orleans, La.

Lewis C. Klopp, '94, North Heidelberg, Berks County, Pa.

Linwood S. Corson, '93, 2427 South Carlisle Street, Philadelphia.

John Jos. Kelley, '94, Conshohocken, Montgomery County, Pa.

Richard M. Shoemaker, '62, 1818 Chestnut Street, Philadelphia.

Louis P. Carstens, '96, 1000 Spring Garden Street, Philadelphia.

John E. Wishart, '90, 2516 East Somerset Street, Philadelphia.

Dr. Charles A. Zeller, '93, Factoryville, Wyoming County, Pa.

Jos. H. Sames, '95, 1008 St. Bernard Street, West Philadelphia, Pa.

Oscar J. Lach, '87, Washington and Chester Avenues, Newark, N. J.

A. F. Kottcamp, '93, 412 South Thirteenth Street, Philadelphia, Pa.

Frank R. Rohrman, '83, 1431 North Twelfth Street, Philadelphia, Pa.

Fred. Dannenhauer, '93, Sixth and Jefferson Streets, Philadelphia, Pa.

Dr. Elias K. Boltz, corner Ann and Edgemont Streets, Philadelphia.

Wm. H. Dewees, '96, Eighteenth and Cumberland Streets, Philadelphia.

Dr. B. Frank Smith, '91, 252 East Sixtieth Street, New York City, N. Y.

Abraham L. Metz, '96, corner of Fifteenth and Race Streets, Philadelphia.

Ephraim K. Smith, '61, corner Forty-first and Walnut Streets, Philadelphia.

Clayton M. Nagle, '94, corner Smith and High Streets, Perth Amboy, N. J.

Mrs. Annie Rex Stephen, '95, 2013 North Twenty-fifth Street, Philadelphia.

Dr. Chas. S. Rottener, '87, 1510 North Twenty-ninth Street, Philadelphia.

Flor. Jos. Schmidt, '83, Seventy-first and Cottage Grove Avenue, Chicago, Ill.

Roland W. Loveland, '94, northwest corner Sixth and Penn Streets, Camden, N. J.

James S. Holt, '96, southwest corner of Twelfth and Race Streets, Philadelphia.

Alex. S. Besore, '91, southeast corner of Fourth and Huntingdon Streets, Philadelphia.

Wm. Jos. Mathews, '95, northeast corner of Eighth and Arch Streets, Philadelphia, Pa.

Llewellyn H. Lewis, '85, southeast corner Ninth and Somerset Streets, Philadelphia.

Wm. W. Chalfant, '94, northwest corner of Fifteenth and Tasker Streets, Philadelphia.

Howard F. Stine, '96, northwest corner Twentieth and Tasker Streets, Philadelphia.

Geo. D. Feidt, '91, manufacturing pharmacist, 610 Arch Street, Philadelphia.

PERSONALS.

——John Jos. Kelley, '94, is managing the Bellevue Pharmacy, of this city.

——M. F. Maples, '96, writes that he is now with the Colorado Springs Drug Company, of Colorado Springs, Col.

——Benj. Shoemaker, '66, is apothecary at the Presbyterian Hospital, Thirty-ninth Street and Powelton Avenue, Philadelphia.

——O. F. Lenhardt, '88, having been elected one of the magistrates of Norristown, has sold his drug store to J. C. Life, of Ohio.

——Joseph T. Griffith, '90, formerly of Schuylkill Haven, Pa., has accepted a position with Geo. H. English, '81, of Germantown, this city.

——Charles T. Heller, '86, writes that the annual meeting of the Minnesota Pharmaceutical Association will be held August 23–24, 1897, at Lake Park Hotel, Lake Minnetonka.

——At the annual meeting of the Photographic Society of Philadelphia, held April 14, 1897, John G. Bullock, '79, was elected a director. The membership of the society is now over 200.

——Horace B. Heysham, '95, who is the manager of the pharmacy in Bridgeport, owned by Charles B. Ashton, intends resigning next month so as to study medicine at Jefferson College, Philadelphia.

——Wm. R. Warner, '56, has sailed for Hamburg. He intends, while abroad, to attend the sessions of the International Medical Congress to be held at Moscow, Russia, and will read a paper at the Congress on "Sumbul Root."

—— Joseph Lowenburg, '89, who was engaged in the drug business for a number of years in Scranton, Pa., from where he removed his stock

and fixtures, is now located in an admirably appointed store at Mill and Green Streets, Norristown, Pa.

——The many friends of Caswell A. Mayo, '87, editor of the *American Druggist and Pharmaceutical Record*, will be pained to learn of the recent decease of his wife, Hattie Trenkmann Mayo, and will extend to him their sincerest sympathy in his sorrow.

——Of women pharmacists of Norristown, there is Mary A. Haney, '95, of Portland, Me., who has filled the post of druggist to the Women's Department of the State Hospital for the Insane for the last three years. Miss Haney is a registered pharmacist of Pennsylvania, and is possessed of estimable personal and business qualifications.

——Before the Botanical Section of the Academy of Natural Sciences of this city, Joseph Crawford, '84, recently gave a talk upon a "Ten Days' Tour in Florida, Botanically Considered." He showed several hundred specimens of plants for the two weeks spent in Florida. His best collecting was off the bow of the boat and from the saloon window in the trip up and down the Ocklawaha River, "a river of 100 miles and with 199 bends."

——The American Pharmaceutical Association, at the invitation of the Belgian Minister at Washington, D. C., has named the following delegates to represent the association at the International Pharmaceutical Congress, at Brussels, this summer:

Joseph P. Remington, '66, of Philadelphia, and Louis Dohme, of Baltimore, with Frederick B. Power, '74, of London, England, and Adolph Meyer, of New Orleans, as alternates.

——Mrs. E. Rudolph, for so many years secretary of the Louisiana Pharmaceutical Association, died April 15, 1897, and her place has been filled by President Viallon, who has appointed Harry V. Arny, '89, of New Orleans, to act in that capacity until the annual meeting of the Association. Mrs. Rudolph was an extraordinary woman in many respects, and it will be difficult for the Association to wholly fill the place she so long honored and graced. A proper memorial of her was presented at the meeting of the Association, held May 11, 1897.

——At the recent Commencement of the Jefferson Medical College of this city, Wm. G. Shallcross and Howard F. Pyfer, both graduates of the class of '93, graduated, the latter capturing the prize of $25, offered by Prof. Edward P. Davis, for the best report of the clinical lectures of the latter on obstetrics. Shallcross and Pyfer will be remembered as the "Heroes of Billy Penn," for it was at their instigation, in 1893, that the huge bronze statue of William Penn, temporarily standing in the City Hall courtyard, was decorated one night, in "blue and white" bunting; an act that set the whole town talking the next morning.

——Dr. Adolph W. Miller, '62, reporting for the Miller-Jahn botanical excursions of this city, found, on April 3, in bloom or bud, on the way from Belmont to Darby, the following specimens: Stellaria media, Smith; Claytonia virginica, L.; Saxifraga virginiensis, Michx.; Alnus serrulata, Willd.; Lindera benzoin, Blume; Sanguinaria canadensis, L.; Acer rubrum, L.; Draba verna, L.; Ranunculus ficaria, L.; Populus alba, L.; Hepatica triloba, Chaix. On April 4, near Swarthmore, there was found, in addition to the above: Capsella Bursa-pastoris, Moench; Lamium amplexicaule, L.; Taraxacum officinale, Weber; Symplocarpus fœtidus, Salisb.; Dryopteris acrostichoides, Michx.; Mitchella repens, L.; Epigæa repens, L.; Poa annua, L.; Salix discolor, Muhl.; Cydonia japonica, Persoon; Antennaria plantaginifolia, Hook; Ribes aureum, Pursh.

ADDRESSES WANTED.

——The secretary of the Alumni Association, Wm. E. Krewson, 1836 Franklin Street, Philadelphia, desires the addresses of the following graduates:

Alsentzer, Chas. F., '91.
Anstett, Zachary Taylor, '76.
Ball, Wm. A., '77.
Barnitz, Lincoln Gray, '89.
Bassett, Fenwick H., '80.
Beckler, Warren B., M.D., '87.
Bell, James E. S., '88.
Beuter, John, '81.
Boorse, Henry A., '83.
Boose, Wm. E., '96.
Boyd, Abraham, '68.
Brown, Frank L., '86.
Brown, Charles, '92.
Buckholtz, Wm. M. G., '87.
Butler, Geo. W., '83.
Chiles, Edward, '70
Chiles, Richard T., '73.

Christ, Geo. R., '94.
Costin, John R., '91.
Crawford, Sam'l D., '84.
Daniels, Charles R., '96.
Davison, B. J., '85.
Dean, Norman R., '78.
Deuschle, Wm. L., '85.
Drew, A. Damar, '86.
Drever, George F., '93.
Duffie, Silas J., '86.
Dugan, Wm. F., '74.
Eberly, David A., '95.
Edwards, Howard M., '82.
Ehler, Wm. Rush, '70.
Ellis, David, '95.
Evans, Chas. Boon, '88.
Fischer, Albert Martin, '86.
Foresman, Harvey B., '95.
Gegan, James J., '60.
Giffin, Henry R., '86.
Harner, J. M., '67.
Henderson, Robert G., '94.
Hepler, Wm. C., '88.
Hillary, John F., '65.
Howard, Tod, '87.
Hudson, Chas. M., '91.
Jaeger, Ernest C., '93.
Johnson, John G., '78.
Johnson, Theodore M., '83.
Kielhorn, Henry, '73.
Kinsey, Jos. S., '93.
Lautenbacher, Wm. R., '96.
Leigh, Charles N., '90.
Lloyd, E. A., '96.
Loenberg, Jos., '89.
Lutz, Irwin B., '91.
MacLennon, W. F., '91.
Mayer, C. E., '85.
McFarland, Robert, '93.
McCoy, F. M., '84.
Massey, Jas. Thos., '86.
Mengel, Chas. W., '81.
Miller, Frank, '94.
Miller, Harper G., '95.
Mitchell, Wm. S., '75.
Morley, Richard C., '78.
Moser, Americus H., '65.
Mulheron, John D., '90.
Murray, E. L., '90.
Muntzer, Wm. C., '88.
Neil, Wm. Edgar, '86.
Netherton, S. O., '92.
Nolan, D. A., '94.
Patton, John G., '87.
Petrie, Edward S., '84.
Pfeuffer, Wm., M.D., '91.
Phelps, Frederick H., '69.
Price, John A. V., '82.
Reed, David R., '81.
Reah, Edward A., '93.
Reap, Edward A., '93.
Ritter, F. W., '95.
Rohrer, Joshua E., '84.
Rosenkraus, Cyril D., '89.
Rugte, Oscar G., '93.
Sahm, Louis N., '92.
Schoppe, Lenard A., '90.
Schraedley, Frederick A., '90.
Scott, Theodore W., '90.
Scull, Jas. I., '93.
Sherman, Jos. B., '89.
Smucker, Milton C., '92.
Senneff, Jacob, '62.
Smith, Geo. M., '85.
Smith, J. S., '89.
Smith, Robert V., '94.
Spragle, Elmer, '91.
Steinhilber, Harry E., '82.
Steinman, Gustav, '87.
Stevenson, John S., '90.
Stevens, Frederick M., '89.
Strater, Henry H., '81.
Strehl, Louis, '66.
Sulouff, Samuel H., '94.
Swope, James W., '81.
Taylor, Wm. F., '94.
Thum, John Carl, '96.
Turner, Curtis W., '79.
Tyler, Thos. V., '90.
Uller, Emil J., '88.
Unzicker, Chas. B., '69.
Ward, Percy H., M.D., '89.
Wayman, John M., '86.
Weber, Wm., '71.
Weckler, Gus. A., '87.
Wehler, J. Randolph, '93.
Wells, E. M., M.D., '76.
Weil, John W., '89.
Wellevir, Robert F., '87.
Williams, Wm. J., '88.
Williams, Daniel Albert, '90.
Williams, Robert F., '87.
Williams, J. H., '91.
Williams, Neri B., '85.
Woolston, Clifford M., '82
Yerkes, Chas. M., '94.

NOTES.

——At the annual meeting of the Alumni Association of the Philadelphia College of Pharmacy, held April 12, 1897, Secretary Wm. E. Krewson, '69, reported that the total membership up to that date was 2,749.

——G. B. Ryland, '96, writes from Pittsburg, Pa., that he has held first place for the past six months in one of the largest stores in that city, adding the statement: "A P.C.P. boy always takes first place in Pittsburg. There are five of the class of '96 in the city at present, all holding good positions."

——Dr. Richard V. Mattison, '73, says that one of the reasons why the scientific spirit is so omnipresent among all classes of people in Germany is due to the fact that every encouragement is given to its development by the public authorities. Almost every village in the fatherland has its scientific museum, and every incentive is given the youth of the land to excel in scientific work.

——*The Pharmacologist* is the title of a new journal issued by Frederick K. Stearns, of Detroit, Mich. Dr. Frank E. Stewart, '76, is editor. The journal, a sample copy of which we have received, is devoted to the subject of drugs, both from a scientific and commercial point of view, each having a separate department of its own. It is proposed to issue it quarterly, and on account of the peculiar field which it will cover and its reasonable subscription price (25 cents a year), there is every reason to believe that it will achieve a large measure of success, especially under the vigorous editorial direction of our fellow-alumnus.

——George W. Hayes, '82, is the City Engineer of Lebanon, Pa. He has contributed an interesting and able paper on the subject of "American Iron Slag Paving," to *Municipal Engineering*. Mr. Hayes reports the results of experiments on the use of cinder or slag from reduced iron ores for road building by the city of Lebanon. He says that city streets constructed of cinder become very smooth, and are the paradise of the bicycle rider, unless the remembrance of the burning liquid state in which the cinder once was may somewhat detract from such an optimistic view, and cause the mind of the gentle bicycler, and particularly the "scorcher," to think of regions where there is no water to assuage the thirst, and where there is no use for pneumatic tires.

——Dr. Susan Hayhurst, '83, an alumnus of the Woman's Medical College, of this city, comes from Quaker stock, and, with six brothers and three sisters, was reared in Puritanical strictuess. She spent the early years of her life as a school teacher, but on moving to Philadelphia became interested in the work of the Woman's Medical College, which she accordingly entered. She graduated in 1857, socially ostracised by her sex because of her profession. At the earnest solicitation of the Woman's Hospital, she was persuaded to take charge of the pharmaceutical department, a position of decided responsibility. To perfect herself in her position she matriculated at the Philadelphia College of Pharmacy, and was the first woman to graduate from this school, graduating in 1883. Her work since that time speaks for itself, and conclusively shows that there is a field for women in practical pharmaceutical work. One bright and up-to-date "pharmacy" in this city is owned and managed entirely by women who have been students under Dr. Hayhurst.

——The eleventh annual meeting of the Delaware Pharmaceutical Association was held in Milford, May 6, 1897. Isaac S. Truit, president of the Town Council, made the address of welcome, and N. B. Danforth, of Wilmington, responded on behalf of the members. President Jacob Y. Foulk delivered an annual address, dwelling mostly on trade problems. F. W. E. Stedem, '82, and J. H. Hahn, '81, of Philadelphia, were present as delegates from the Pennsylvania Association, and were invited to sit as corresponding members. Mr. Stedem, upon invitation, made a very interesting address on urinary analysis, which was received with applause. Mr. Hahn extended a warm invitation to the members to attend his State meeting at Delaware Water Gap. A vote of thanks was tendered. The various standing committees reported through their chairmen. The following officers were elected for the ensuing year: President, W. F. Dunn, Smyrna; Vice-Presidents, H. K. Watson, Wilmington, Dr. G. W. Marshall, Milford, H. L. Wallace, Seaford; Secretary, F. W. Fenn, Wilmington; Treasurer, Jos. P. Williams, Wilmington; Local Secretary, C. B. Raymond, Smyrna.

Item.

In the current issue of the *Trade Magazine*, with the accompaniment of a frontispiece, entitled "Sunshine,"—which represents a little girl so bright and cheery and healthy that one would fain believe she had been raised on Eskay's Albumenized Food!—there is given an interesting sketch of a man who is probably more generally known in pharmaceutical circles in this country than any other man, Mahlon N. Kline, of the firm of Smith, Kline & French Company, of Philadelphia.

Mr. Kline was born upon a little farm near Hamburg, Pa., on February 6, 1846. His boyhood was very much the same as that of any of thousands of farmers' boys to-day. He rose early, worked hard at tasks suited to his strength, retired with the sun, and slept as only a boy who has had plenty of exercise and plain, wholesome food can sleep. In winter he attended the country school near his father's farm, and tradition has it that he "took" to books.

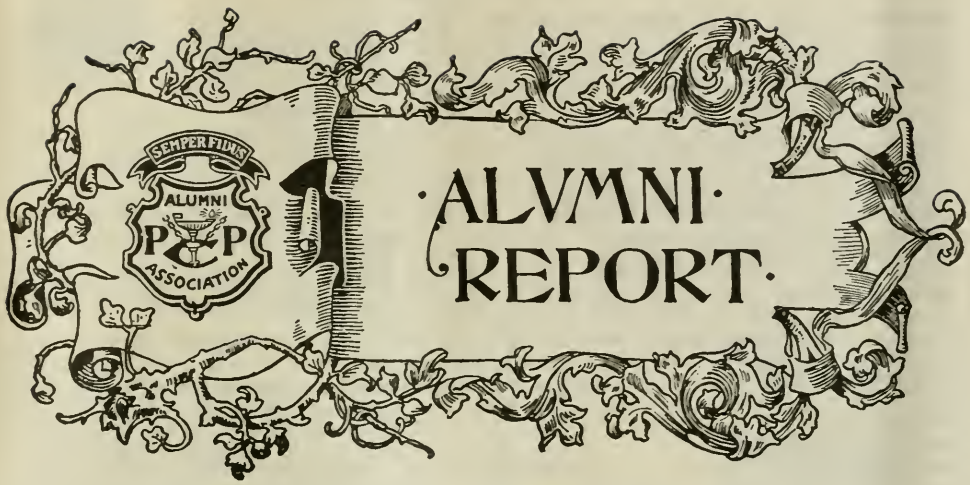
In 1863 he began teaching in a country school near Reading, and, later, entered a country general store in West Hamburg, Pa. Later, he went to Poughkeepsie, N. Y., and took a course in Eastman's Business College, located at that place.

On February 15, 1865, he secured a situation in Philadelphia, as bookkeeper for the firm of Smith & Shoemaker, wholesale druggists. The new bookkeeper used his spare moments in learning details of the drug business, and soon had acquired sufficient knowledge to sell goods. He was clean, energetic, gentlemanly, educated. He was overflowing with good humor and brimful of the pertinacy and shrewdness which probably was a heritage from his Dutch ancestry. No one doubted his word, for from childhood Mahlon Kline has been taught to value the truth. He, therefore, made many customers, and the customers became friends; later, he became a travelling salesman. He speedily worked up a large and successful business. The firm not only perceived these efforts, but appreciated them, and, in 1868, gave him an interest in the business. In two years more Mr. Shoemaker retired from the concern, and the business proceeded as Smith, Kline & Co. From that time its record has been one of uninterrupted prosperity. Larger quarters were required to accommodate its business, and, in 1879, 309-11 North Third Street was occupied. This outgrown, Nos. 429-31 Arch Street, a huge building, erected especially for them, was taken. Then Nos. 433 and 435 were added. Additional quarters have been secured on Cherry Street, also Nos. 301-7, and a large building back of these.

In 1888 the firm was incorporated as the Smith & Kline Company. Two years later, after the liquidation of the business of French, Richards & Co., Harry B. French was elected Vice-President, the name of the corporation being changed to the Smith, Kline & French Company, as it is known to-day. Perhaps no wholesale drug house in the country does so large a business, and it is no more than just to say that to Mr. Kline is this very largely due, for he has been the leading spirit in its direction; its business has increased from $60,000 a year, in 1865, until now it amounts to almost as much in a single week.

As might be expected, Mr. Kline has occupied a prominent position in the larger business movements of Philadelphia and the country at large. He joined the National Wholesale Druggists' Association in 1882, was its President in 1885, and, for ten years, chairman of its Proprietary Committee. He has also been an active and enthusiastic member of the Trades League of Philadelphia, one of the Board of Directors of the Philadelphia Drug Exchange, a member of the Committee on Legislation of the Pennsylvania Pharmaceutical Association, and a Trustee of the Philadelphia College of Pharmacy. He is a vestryman in the Church of the Saviour, West Philadelphia, a director of the Brotherhood of St. Andrew, a member of its Executive Committee, chairman of its local council, and one of the Board of Managers of the Franklin Reformatory Home.

Great as are the claims of the large business interests which are committed to his hands, he is not slow to recognize and discharge the obligations which he owes to his country and to the Supreme One who controls the destinies of men. He occupies an enviable position, therefore, not only as a merchant, but as a citizen and a member of the Christian church.



PUBLISHED BY THE ALUMNI ASSOCIATION OF THE
PHILADELPHIA COLLEGE OF PHARMACY.

VOLUME THIRTY-THIRD.

(1896-1897.)

EDITOR: JOSEPH W. ENGLAND.

BUSINESS MANAGER: WM. NELSON STEM.

PUBLISHING COMMITTEE:

Wm. A. Bullock, '86, Wm. E. Krewson, '69, Wm. L. Cliffe, '84, Jos. W. England, '83, Wm. Nelson Stem, '73.

PHILADELPHIA,
PENNA.

Index.

ADDRESSES:

Diphtheria Antitoxin. By Dr. Edwin Rosenthal, Ph.G. 30
Consumption; Its Nature, History, Curability and Prevention. By Dr. Lawrence F. Flick 149
How We Think. By F. X. Dercum M.D. 100
The Discovery of Vaccination, and its Introduction into America. By Dr. Wm. M. Welch, Physician to the Municipal Hospital of Philadelphia, 51
To Members of the Second Pan-American Medical Congress, Section on Pan-American Pharmacopœia. By Prof. Joseph P. Remington 62
The Physiology of Education. By Dr. Albert E. Ferree Witmer 121
Valedictory Address to the Class of '97. By. Prof. Joseph P. Remington 173
Alumni Gold Medal, Presentation of 164
Alumni Prizes, Presentation of 164, 165
Annual Commencement 171
Annual Meeting 189
Annual Reception 164
Class History 168
Class News 41, 65, 113, 134
Class Oration 165
Class Poem 166
Class Prophecy 169
College Prizes, Awarding of 172, 173

EDITORIALS:

A New Adulteration Law 118
Alcohol Legislation 47
College Education Pays 185
Diluted Fluid Extracts 117
Drug Store Ownership 6
Edward C. Jones Memorial Fund 183
Our Report 3
Preliminary Medical Education 70
Self-Medication 25
The Legal Status of the Rebate System 4
The Limitations of Standardization 95
The Registration of Physicians as Pharmacists . . 139
The Selling of Proprietaries 26
The Seventy-seventh Announcement 184
Examination Questions 199
Executive Board Meetings 9, 153, 195
Faculty Reception of '97 175
Honor Students of '97 159
Items 20, 43, 136, 178, 212
Our Graduates 14, 38, 64, 92, 111, 130, 157, 206

PAPERS:

Alcohol Correspondence 107
Correspondence on the Manufacture of Some Galenicals from Fluid Extracts. By Edward R. Squibb, Charles Rice and John Uri Lloyd 101

PAPERS (Continued)

Do Manufacturers Use Pharmacopœial Menstrua in Making Fluid Extracts that They Market as Pharmacopœial? By Joseph W. England . 105
Histology of the Vegetable Tissue Systems. By Dr. J. Louis D. Morison 144
In Union there is Strength. By J. Henry Schroeder, Cincinnati, Ohio 126
Legal Work of the Pennsylvania Board of Pharmacy. By J. Campbell Lancaster 8
Shall Drug-store Experience as a Requirement for a Pharmaceutical Degree be Retained? By George M. Beringer 34
Shall Pharmacy Graduates be Given Advanced Standing in Medical Colleges? By E. Q. Thornton, Ph.G., M.D. 78
Tax-free Alcohol for Druggists. By George M. Beringer 123
The Pan-American Medical Congress 62
The Pharmacy Graduate in Medicine. By B. Franklin Stahl, Ph.G., M.D., B.S. 75
The Interests of the Drug Trade as Represented and Misrepresented before the Joint Select Committee of Congress on Alcohol in the Manufactures and Arts. By George M. Beringer 80
Pharmaceutical Meetings . 23, 48, 73, 97, 120, 142, 163, 187

REPORTS OF:

Finance Committee, Annual 194
Memorial Committee 12, 109, 128, 192
President, Annual 189
Secretary, Annual 190
Treasurer, Annual 194

SKETCHES:

Bates, John P. 161
Breithaupt, Alphons P. 160
Brumbaugh, Albert S. 159
Cooper, Walter G. 134
In Memoriam 137
Kennedy, Geo. W. 181
Kraemer, Henry 23
Lowe, Clement B. 115
Matusow, Harry 160
Mayo, Caswell A. 94
Metzler, Claude D. 161
Morgan, Clayton E. 160
Morison, J. Louis D., M.D. 1
Pearce, Samuel R. 161
Power, Frederick B. 67
Praul, Walter F. 162
Smiley, Laura M. 162
Wiegand, Thomas S. 45
Wilson, Oliver F. 162
Social Meetings 30, 51, 100, 121

The Biggest Hit he ever made in the way of an advertisement with Physicians—

Mr. Frank Le Page, of the firm of Brister & Le Page, Druggists, New Philadelphia, Ohio, writes as follows: "There have been up to the present time, eight cases in which your antitoxin has been used, and in every instance the patient has recovered. It is the biggest hit I ever made in the way of advertisement with physicians. Dr. ————, one of————'s customers, dropped in last week and bought a syringe and package of Extra Potent, for a case of his in Dover. This is the Dr. I have been trying to get for a long time. I do not know of a single preparation like it: the fact of having Mulford's Antitoxin in stock is worth $25.00 as an advertisement to any store that is trying to sell physicians."

We want a live, up-to-date drug firm to represent us in every town.

To our agents we make exceedingly liberal inducements and aid them in every way in interesting the physicians of their city in our products. Write for our terms and an up-to-date brochure.

H. K. MULFORD COMPANY,

Chicago:
112 and 114 Dearborn St. 412-420 S. 13th St., Philadelphia

Feidt's Soluble Fountain Chocolate

A good pure chocolate at a reasonable price, that is just as good as any other chocolate for fountain use at double the price.

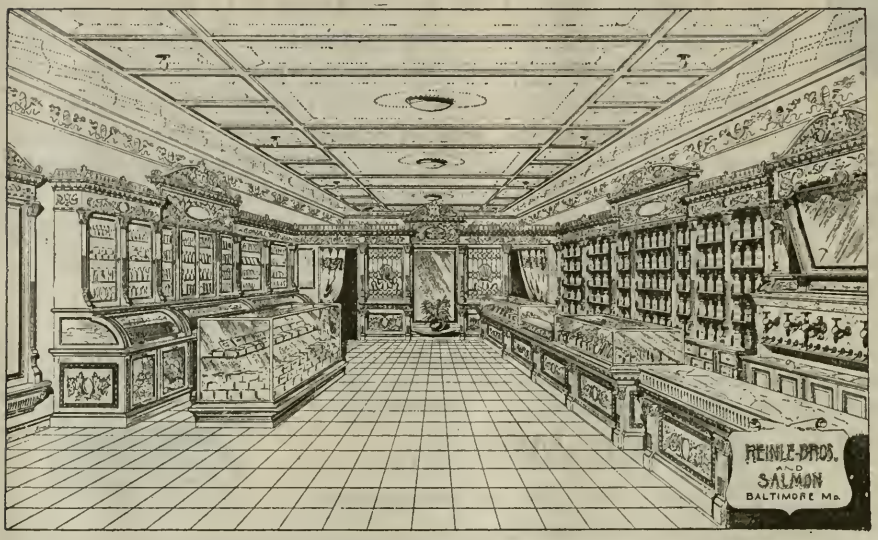
1-lb. tins	$0.45	net per lb.
3 " "	.40	" "
5 " "	.35	" "

Special quotations for large quantities.

IN ORDERING PLEASE SPECIFY G. D. F. & CO.

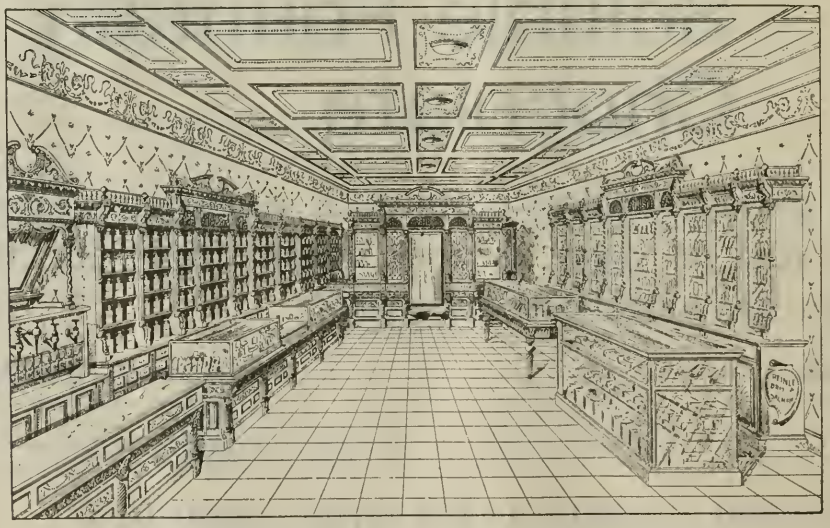
REINLE BROS. & SALMON,

Manufacturers of Drug Store Fixtures,
BALTIMORE, MD.



Fixtures made for J. C. Field, Sommerville, N. J.

. . . Show Cases . . .



Design of Fixtures in Cream and Gold furnished for Storeroom, 13th and J Sts., N. W., Washington, D. C.

SPECIAL DESIGNS AND ESTIMATES FURNISHED

J. FEHR'S
Compound Talcum

"BABY POWDER."

The Hygienic Derma Powder for Infants and Adults.

Originally investigated and its therapeutic properties discovered in the year 1868 by Dr. Fehr, and introduced to the Medical and the Pharmaceutical Professions in the year 1873.

COMPOSITION.—Salicate of Magnesia with Carbolic and Salicylic Acid.

PROPERTIES.—Antiseptic, Antizymotic and Disinfectant.

USEFUL AS A GENERAL SPRINKLING POWDER, with positive Hygienic, Prophylactic and Therapeutic properties.

Good in All Affections of the Skin.

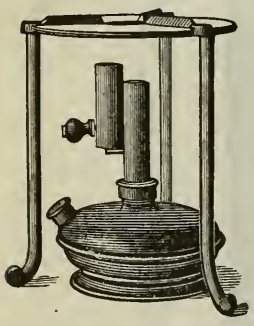
SOLD BY THE DRUG TRADE GENERALLY. Per Box, plain, 25c.; perfumed, 50c. Per Dozen, plain, $1.75; perfumed, $3.50.

THE MANUFACTURER,

JULIUS FEHR, M. D., Ancient Pharmacist,

HOBOKEN, N. J.

Only advertised in Medical and Pharmaceutical prints.



BULLOCK & CRENSHAW

528 Arch St., Phila.

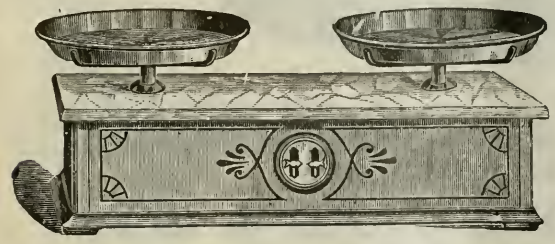
Importers, Manufacturers and Dealers

Chemical Apparatus and Fine Chemicals

Outfits for Analytical and Pharmaceutical Laboratories

Catalogues furnished on receipt of postage, 6 cents

ESTABLISHED 1840.



HENRY TROEMNER,

MAKER OF

Fine Scales and Weights

PRICE-LIST ON APPLICATION.

Troemner's Scales are used exclusively by all the U. S. Mints, Treasury Departments and in the Army and Naval Hospitals.

710 MARKET STREET, PHILADELPHIA.

THERE IS NO LINE OF

POWDERED DRUGS

So Complete, so Reliable, or at Such Reasonable Prices, as

OUR EXTRA SELECTED POWDERS

FAC-SIMILE OF PACKAGE

ONE POUND STRICTLY PURE
POWDERED IPECAC ROOT.
Cephaelis Ipecacuanha.
Prepared from carefully selected and garbled Rio
Racine Bresilienne.
DOSE.—1 to 20 grains.
Dovers Powder, 180 grs.; Po. Squill, Po. Ammoniac, each 60 grs.; Sugar,
Po. Ipecac, Po. Tragacanth, each 120 grs.; Sugar,
Bucklers Croup Mixture—Tartar Emetic, 2 grs.
ALLAIRE, WOODWARD & CO.

OF OUR EXTRA SELECTED POWDERS

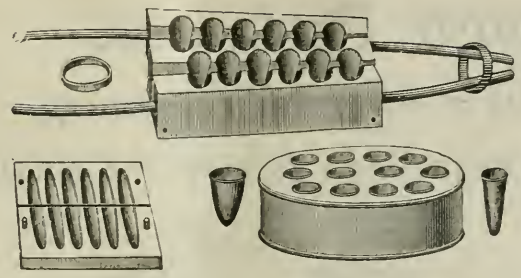
They are powdered from the choicest materials with the greatest care, labelled with the botanical, common, German and French names; also the medical properties and formulas for preparations in which the powders may be used. Are put up in sealed tin cans of one pound each, and

NEVER OBTAINABLE IN BULK

ALLAIRE, WOODWARD & CO.

PEORIA, ILL.

SUPPOSITORY MOULDS, ETC.



RECTUM SUPPOSITORY MOULDS,
best white metal, 10, 15 or 30 grains. Trays to hold 6 and 12 moulds, tin.

VAGINAL SUPPOSITORY MOULDS,
best white metal. Tray to hold 6 and 12 moulds, tin.

RECTUM SUPPOSITORY MOULDS,
brass, two sizes. To make 6 or 12.

VAGINAL SUPPOSITORY MOULDS,
brass. To make 6 and 12.

MOULDS for Gelatin Bougies.
Camphor Ice.
Cosmetics—all sizes and shapes.
Caustic.
Pastilles.

PUNCHES for lozenges—all shapes.

A. H. WIRZ, Manufacturer of Metal Goods for the Trade, No. 917 Cherry Street, Philadelphia, Pa.

DRUGGISTS' AND PHYSICIANS' EXCHANGE BUREAU

Long-Established Drug Appraiser and Transfer Agent

DRUGGISTS' AND CHEMISTS' STOCKS AND FIXTURES VALUED AND SOLD

FOR SALE at all times, **DRUG STORES** in this City, State and neighboring Cities and States.

PARTNERSHIPS ARRANGED

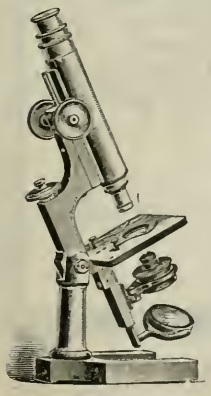
Particulars of Business forwarded to **buyers, free.** Send stamped envelope with inquiry. All business strictly confidential.

REFERENCE:—The entire Drug and Chemical Trade, wholesale and retail, also many physicians, in Philadelphia.

CALL OR ADDRESS

DANIEL PHREANER, No. 525 Commerce Street, Phila. (*second floor*).

OFFICE DAYS, MONDAY, WEDNESDAY AND FRIDAY, 9 A.M. TO 3.30 P.M.



ESTABLISHED 1853.

JOSEPH ZENTMAYER,

OPTICIAN

MANUFACTURER OF

MICROSCOPES, SLIDES, COVERS, GLASS AND MOUNTING MATERIAL, SPECTACLES AND EYE-GLASSES.

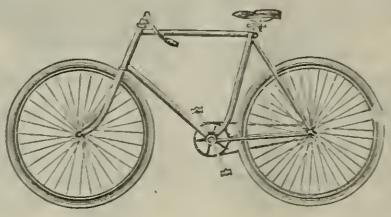
209 South Eleventh Street, Philadelphia.

We Repair all Instruments of Precision
Special Attention Given to Oculists' Prescriptions

Catalogues on Application.

A Rough Test

Of a Speed-Producing Noiseless Bicycle Chain



PROVIDENCE, R. I., May 21, 1897.

KEATING WHEEL COMPANY,

Middletown, Conn.

GENTLEMEN:

We had a very interesting affair occur the other day at this branch and no doubt you will be interested in the same.

We had a call from Mr. Hess, one of the editors of the *Providence Journal.* Mr. Hess has charge of the page entitled "Industries." We were endeavoring to show him all the good qualities of the new roller chain, and his first claim was that the same would fill with dirt. We had somewhat of a lengthy argument on this point, and it resulted in his offering to give us a good write-up in the Providence papers about this chain, providing he (Mr. Hess) was not able to stop the roller in regular riding within three hours. I accepted his offer and allowed him three days to stop the roller and told him furthermore he could put it to any test he wanted to. He has had the KEATING GRAND now ten days and he frankly acknowledges that he cannot do it. He has employed as assistant, Prof. Bumpus, of Brown University, and Friday night last he informs me that they laid all the dirt and mud on the chain that it could possibly hold and started off to ride; he acknowledges that when he started he chuckled to himself that he had got the best of the Keating Company, but he has now had to allow that within three minutes the chain was entirely clear and there was not a roller but turned nicely.

In consideration of this test we are entitled to a good write-up in this paper on the subject of the Keating Double Roller Chain and the same is to be illustrated with cuts.

Very truly yours,

KEATING BRANCH HOUSE.

(Mention "REPORT" and ask for Catalogue.)

The Juice of Fine Fruit Makes Rich Concentrated Syrup

Our Concentrated Syrups are made with the utmost care direct from the fruit. They are the finest Concentrated Syrups on the market and the most attractively put up—in gallon jugs only, with handsome lithographed labels; price, $1.75 a gallon. Here is the list of them:

Ambrosia	Coffee	Lemon	Pear	Red Orange
Apricot	Chocolate	Lime	Persian Sherbet	Root Beer
Arctic Sherbet	Cherry	Mint	Pineapple	Sarsaparilla
Alaska Snowball	Cranberry	Nectar	Plum	Sherbet
Banana	Grape	Orange	Quince	Strawberry
Blackberry	Huckleberry	Orgeat	Raspberry	Vanilla
Black Raspberry	Koko Fizz	Peach	Red Currant	

As for our Pure Fruit Juices it is enough to say that they fully maintain all their old time supremacy. Our experience and facilities enable us always to buy fruit with the best of juice in it, and to turn out juice with all the best of the fruit in it. Here is the list:

Apple	Grape (Concord)	Pear (Seckel)
Apricot	Grape (Delaware)	Pineapple
Banana	Grape (Wild)	Plum
Blackberry	Grape (Unfermented)	Quince
Black Raspberry	Huckleberry	Raspberry
Blood Orange	Imperial Sicily Lemon	Raspberry Phosphate
Calisaya Phosphate	Lime	Raspberry Vinegar
Celery and Orange Phosphate	Morella Cherry Phosphate	Red Currant
CHERRY RIPE	Orange Phosphate	RED MESSINA ORANGE
Cherry (Morella)	Peach	Sicily Lemon Phosphate
Cranberry	Pear (Bartlett)	Strawberry
Fruit Phosphate	Pear (Jargonelle)	Wild Cherry Phosphate
Grape (Catawba)	**Price $6 per dozen quart champagne bottles**	

"DRIVEN TO DRINK."

A charming cut-out, run by clock-work, of a dainty little girl who can never get enough Red Messina Orange. Comes with a $33 00 order for our goods.

And here are reasons in a nut-shell for our supremacy in the making of Fruit Juices and Concentrated Syrups. Philadelphia is the fruit centre of the U. S. We are in Philadelphia. We get the pick of all the choicest fruit before it loses its first fresh crispness. We know the fruit growers and sellers and they know us. Then, too, we have long experience and adequate facilities for handling immense quantities of fruit quickly and while it is at its best. Only a day or two and the entire year's supply of Strawberry Juice, for instance, is crushed from the berry and bottled. And so with all the fruits in their season.

Our Juices, Syrups, and other soda requisites are thirst-coaxers; the free advertising matter that accompanies them has great drink-compelling power. With the two together you can make your store the good soda centre for your community, you can attract the wheelmen and hold a soda trade that will be the envy of all druggists within five miles of you.

Are you ready? Then order the coaxers and the drink-compellers will come.

HEAD OFFICE AND WORKS Philadelphia

BRANCH OFFICES
- New York 90 John Street
- Chicago 59 Lake Street
- Pittsburg 624 Smithfield Street
- Boston 15 and 17 India Street
- London 120½ Southwark Street S E

Hance Brothers & White

Pharmaceutical Chemists

"The Peptogenic Milk Powder

with the method given, is the most exact, natural and practical means at present known, of rendering cows' milk suitable as a comprehensive substitute for woman's milk."

ALBERT R. LEEDS, PH.D.,

Professor of Chemistry,

Stevens Institute of Technology.

Drug Cabinets for Students

Only by carefully examining and handling specimens can the student of pharmacy and medicine practically familiarize himself with the properties of drugs. Descriptions of text-books appeal only to the imagination, and even when aided by engravings, the impression received is necessarily imperfect. It is not enough that the student have access to a collection; **he should own his own cabinet,** then with specimen in hand and with the aid of lens and dissecting needle he can intelligently follow the descriptions of his manual.

Specimens of many drugs are easily procured, but there are many more very difficult to obtain; and particularly, the specimens must be unquestionably authentic. Our cabinet will furnish an indispensable supplement to Materia Medicas, Dispensatories, etc.

Write for our 16-page circular, fully descriptive of this collection, prices, etc.

Parke, Davis & Company,

Manufacturing Chemists,

DETROIT, MICHIGAN.

BRANCHES:
NEW YORK: 90 Maiden Lane.
KANSAS CITY: 1008 Broadway.
BALTIMORE: 8 South Howard St.
NEW ORLEANS: Tchoupitoulas and Gravier Sts.
BRANCH LABORATORIES:
LONDON, Eng., and WALKERVILLE, Ont.